

IBM Safer Payments
Version 6.3

Release Notes



This edition applies to IBM® Safer Payments release 6.3.x, Program Number 5725-Z82, and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Introduction

The Release Notes contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.3.x.

How to install and update

For information about how to install and update, see the IBM Safer Payments Implementation Guide.

Versions and PA-DSS certification

For information about versions and PA-DSS certification, see the IBM Safer Payments Implementation Guide.

Download links

- [6.3.0.00 Download instructions](#)
- [6.3.0.01 Download instructions](#)
- [6.3.0.02 Download instructions](#)
- [6.3.0.03 Download instructions](#)
- [6.3.1.00 Download instructions](#)
- [6.3.1.01 Download instructions](#)
- [6.3.1.02 Download instructions](#)
- [6.3.1.03 Download instructions](#)
- [6.3.1.04 Download instructions](#)
- [6.3.1.05 Download instructions](#)
- [6.3.1.06 Download instructions](#)
- [6.3.1.07 Download instructions](#)
- [6.3.1.08 Download instructions](#)
- [6.3.1.09 Download instructions](#)

Support community

To view and search for troubleshooting topics, alerts, workarounds, and more information, go to the [IBM Support Community](#).

Chapter 2. 6.3.x Known Issue and APAR fix lists

The following Known Issues and APARs were fixed in 6.3.x.

IBM Safer Payments fix packs are cumulative, which means that a new patch contains all of its fixes and all fixes for prior fix packs of that major release. For example, 6.3.1.08 includes all fixes in 6.3.1.08 as well as those in previous 6.3 fix packs.

As of 6.3.1.08, all IBM Safer Payments APARs were migrated to a new defect tracking system where they are called *Known Issues*. APAR numbers begin with *PO*, and Known Issue numbers begin with *DT*.

6.3.0.00 APAR fix list

[PO07896](#), [PO08390](#), [PO08400](#), [PO08435](#), [PO08526](#), [PO08530](#), [PO08557](#), [PO08558](#), [PO08606](#),
[PO08623](#), [PO08642](#), [PO08652](#), [PO08719](#), [PO08734](#), [PO08738](#), [PO08751](#), [PO08757](#), [PO08769](#),
[PO08777](#), [PO08778](#), [PO08782](#), [PO08789](#), [PO08793](#), [PO08795](#), [PO08797](#), [PO08810](#), [PO08815](#),
[PO08816](#), [PO08817](#), [PO08821](#), [PO08826](#), [PO08827](#), [PO08829](#), [PO08834](#), [PO08837](#), [PO08840](#),
[PO08844](#), [PO08850](#), [PO08851](#), [PO08857](#), [PO08859](#), [PO08865](#), [PO08871](#), [PO08873](#), [PO08875](#),
[PO08878](#), [PO08885](#), [PO08887](#), [PO08890](#), [PO08899](#), [PO08907](#), [PO08908](#), [PO08909](#), [PO08911](#),
[PO08913](#), [PO08914](#), [PO08922](#), [PO08923](#), [PO08925](#), [PO08935](#), [PO08938](#), [PO08944](#), [PO08947](#),
[PO08961](#), [PO08966](#), [PO08968](#), [PO08984](#), [PO08987](#), [PO08991](#), [PO09000](#), [PO09003](#), [PO09004](#),
[PO09005](#), [PO09008](#), [PO09009](#), [PO09011](#), [PO09020](#), [PO09024](#), [PO09037](#), [PO09041](#), [PO09054](#),
[PO09063](#), [PO09066](#), [PO09075](#), [PO09088](#), [PO09091](#), [PO09103](#), [PO09110](#), [PO09117](#), [PO09120](#),
[PO09124](#), [PO09130](#), [PO09131](#), [PO09136](#), [PO09137](#), [PO09139](#), [PO09145](#), [PO09146](#), [PO09148](#),
[PO09149](#), [PO09155](#), [PO09158](#), [PO09161](#), [PO09172](#), [PO09175](#), [PO09180](#), [PO09184](#), [PO09185](#),
[PO09188](#), [PO09192](#), [PO09194](#), [PO09200](#), [PO09201](#), [PO09202](#), [PO09203](#), [PO09209](#), [PO09213](#),
[PO09217](#), [PO09218](#), [PO09219](#), [PO09238](#), [PO09242](#), [PO09243](#), [PO09245](#), [PO09252](#), [PO09254](#),
[PO09262](#), [PO09275](#), [PO09276](#), [PO09290](#), [PO09299](#), [PO09306](#), [PO09313](#), [PO09325](#), [PO09327](#),
[PO09349](#), [PO09373](#), [PO09377](#), [PO09418](#)

6.3.0.01 APAR fix list

[PO07255](#), [PO09027](#), [PO09134](#), [PO09138](#), [PO09166](#), [PO09187](#), [PO09196](#), [PO09277](#), [PO09281](#),
[PO09285](#), [PO09295](#), [PO09297](#), [PO09320](#), [PO09323](#), [PO09335](#), [PO09346](#), [PO09350](#), [PO09361](#),
[PO09362](#), [PO09401](#), [PO09404](#), [PO09408](#), [PO09456](#), [PO09469](#), [PO09472](#)

6.3.0.02 APAR fix list

[PO08515](#), [PO08657](#), [PO09132](#), [PO09240](#), [PO09284](#), [PO09298](#), [PO09319](#), [PO09326](#), [PO09378](#),
[PO09379](#), [PO09386](#), [PO09397](#), [PO09400](#), [PO09405](#), [PO09410](#), [PO09426](#), [PO09428](#), [PO09435](#),
[PO09440](#), [PO09441](#), [PO09444](#), [PO09446](#), [PO09449](#), [PO09450](#), [PO09452](#), [PO09454](#), [PO09461](#),
[PO09462](#), [PO09470](#), [PO09477](#), [PO09480](#), [PO09483](#), [PO09488](#), [PO09493](#), [PO09495](#), [PO09504](#),
[PO09509](#), [PO09514](#), [PO09515](#), [PO09540](#), [PO09545](#), [PO09547](#), [PO09553](#), [PO09568](#), [PO09577](#),
[PO09580](#), [PO09584](#)

6.3.0.03 APAR fix list

[PO09104](#), [PO09215](#), [PO09300](#), [PO09331](#), [PO09340](#), [PO09383](#), [PO09443](#), [PO09455](#), [PO09508](#),
[PO09522](#), [PO09537](#), [PO09552](#), [PO09576](#), [PO09607](#), [PO09610](#), [PO09611](#), [PO09613](#), [PO09620](#),
[PO09621](#), [PO09639](#), [PO09640](#), [PO09641](#), [PO09661](#), [PO09673](#)

6.3.1.00 APAR fix list

[PO09025](#), [PO09399](#), [PO09413](#), [PO09481](#), [PO09525](#), [PO09594](#), [PO09601](#), [PO09619](#), [PO09643](#),
[PO09646](#), [PO09664](#), [PO09675](#), [PO09682](#), [PO09686](#), [PO09690](#), [PO09701](#), [PO09721](#), [PO09724](#),
[PO09738](#), [PO09742](#), [PO09743](#), [PO09751](#), [PO09780](#)

6.3.1.01 APAR fix list

[PO07683](#), [PO08218](#), [PO08856](#), [PO08906](#), [PO09114](#), [PO09205](#), [PO09212](#), [PO09223](#), [PO09236](#), [PO09279](#), [PO09292](#), [PO09387](#), [PO09394](#), [PO09398](#), [PO09484](#), [PO09578](#), [PO09594](#), [PO09630](#), [PO09631](#), [PO09695](#), [PO09714](#), [PO09723](#), [PO09727](#), [PO09732](#), [PO09735](#), [PO09760](#), [PO09769](#), [PO09770](#), [PO09789](#), [PO09805](#), [PO09808](#), [PO09809](#), [PO09813](#), [PO09815](#), [PO09816](#), [PO09830](#), [PO09834](#), [PO09839](#), [PO09845](#), [PO09846](#), [PO09854](#), [PO09867](#), [PO09870](#), [PO09871](#), [PO09872](#), [PO09878](#), [PO09896](#)

6.3.1.02 APAR fix list

[PO08111](#), [PO08209](#), [PO08644](#), [PO09191](#), [PO09445](#), [PO09548](#), [PO09557](#), [PO09570](#), [PO09605](#), [PO09632](#), [PO09674](#), [PO09749](#), [PO09784](#), [PO09790](#), [PO09794](#), [PO09796](#), [PO09814](#), [PO09818](#), [PO09824](#), [PO09831](#), [PO09847](#), [PO09850](#), [PO09852](#), [PO09855](#), [PO09857](#), [PO09865](#), [PO09868](#), [PO09873](#), [PO09882](#), [PO09885](#), [PO09891](#), [PO09894](#), [PO09900](#), [PO09901](#), [PO09902](#), [PO09910](#), [PO09913](#), [PO09914](#), [PO09920](#), [PO09934](#), [PO09935](#), [PO09940](#), [PO09942](#), [PO09944](#), [PO09952](#), [PO09960](#)

6.3.1.03 APAR fix list

[PO08429](#), [PO08747](#), [PO08864](#), [PO09359](#), [PO09422](#), [PO09485](#), [PO09756](#), [PO09788](#), [PO09825](#), [PO09859](#), [PO09895](#), [PO09912](#), [PO09917](#), [PO09918](#), [PO09925](#), [PO09927](#), [PO09931](#), [PO09938](#), [PO09949](#), [PO09950](#), [PO09951](#), [PO09955](#), [PO09956](#), [PO09957](#), [PO09958](#), [PO09959](#), [PO09964](#), [PO09967](#), [PO09969](#), [PO09970](#), [PO09978](#), [PO10007](#)

6.3.1.04 APAR fix list

[PO09253](#), [PO09492](#), [PO09494](#), [PO09596](#), [PO09842](#), [PO09863](#), [PO09881](#), [PO09933](#), [PO09954](#), [PO09962](#), [PO09965](#), [PO09968](#), [PO09972](#), [PO09974](#), [PO09977](#), [PO09982](#), [PO09984](#), [PO09985](#), [PO09987](#), [PO09988](#), [PO09991](#), [PO09995](#), [PO10008](#), [PO10010](#), [PO10011](#), [PO10014](#), [PO10120](#)

6.3.1.05 APAR fix list

[PO08463](#), [PO09324](#), [PO09356](#), [PO09439](#), [PO09466](#), [PO09474](#), [PO09861](#), [PO09869](#), [PO09919](#), [PO09926](#), [PO09948](#), [PO09983](#), [PO09989](#), [PO09992](#), [PO09998](#), [PO10009](#), [PO10012](#), [PO10015](#), [PO10022](#), [PO10025](#), [PO10027](#), [PO10031](#), [PO10049](#), [PO10053](#), [PO10066](#), [PO10162](#)

6.3.1.06 APAR fix list

[PO09255](#), [PO09334](#), [PO09575](#), [PO09615](#), [PO09645](#), [PO09853](#), [PO09884](#), [PO09999](#), [PO10033](#), [PO10036](#), [PO10041](#), [PO10042](#), [PO10043](#), [PO10044](#), [PO10047](#), [PO10048](#), [PO10050](#), [PO10058](#), [PO10059](#), [PO10061](#), [PO10067](#), [PO10070](#), [PO10073](#), [PO10075](#), [PO10077](#), [PO10082](#), [PO10083](#), [PO10085](#), [PO10087](#), [PO10093](#), [PO10100](#), [PO10104](#), [PO10114](#)

6.3.1.07 APAR fix list

[PO08707](#), [PO09650](#), [PO09719](#), [PO09864](#), [PO10013](#), [PO10017](#), [PO10029](#), [PO10040](#), [PO10101](#), [PO10102](#), [PO10109](#), [PO10111](#), [PO10112](#), [PO10117](#), [PO10121](#), [PO10123](#), [PO10124](#), [PO10129](#), [PO10137](#), [PO10157](#), [PO10161](#)

6.3.1.08 Known Issue and APAR fix list

[DT261334](#), [DT261601](#), [DT269755](#), [DT378209](#), [PO09366](#), [PO09569](#), [PO09778](#), [PO09851](#), [PO10039](#), [PO10054](#), [PO10118](#), [PO10122](#), [PO10149](#), [PO10154](#), [PO10155](#), [PO10175](#)

6.3.1.09 Known Issue and APAR fix list

[DT277055](#), [DT378504](#), [DT379143](#), [DT380010](#), [DT381678](#), [DT386110](#), [DT387182](#), [DT389262](#), [DT389546](#), [DT389548](#), [DT389549](#), [DT391564](#), [PO09835](#), [PO09971](#), [PO10063](#), [PO10065](#), [PO10136](#), [PO10147](#), [PO10172](#), [PO10177](#)

Chapter 3. 6.3.0.00 Release Notes

The Release Notes contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.3.0.00.

This release changed the version number from 6.2.1.02 to 6.3.0.00.

What's new

IBM Safer Payments 6.3.0.00 includes new features and enhancements.

Release highlights

- Attribute categories can now be encoded as Boolean values to be used within PMML models and external model components. Encoded categories are read-only and encoding must be enabled for each category individually.
- The case investigation screen has a new widget to display entries of defined risk lists related to the currently opened case. The defined risk lists first must be selected within the case class definition. The widget and related settings are only available for regular case classes. The new widget is displayed only when at least one risk list was selected in the case class. It then displays all risk list entries that have a relation to the currently opened case. Risk lists that are selected in the case class but do not have entries for the current case are not displayed. However, it is possible to add new entries to these risk lists by using a button at the top of the widget. It is also possible to edit and delete existing risk list entries. To perform these actions an investigator needs an extra role privilege.
- A user who has a privilege to change the Case Class can create and edit Case Investigation Layouts. The Case Investigation Layout is based on the Case Class. After the Case Investigation Layout is created, all of the cases that belong to the same Case Class use the created template to display Case Data.

Customizable Layouts use drag and drop. A user can create, and in some cases configure, the Case Investigation Components and then use drag and drop to position them on the page.

- IBM Safer Payments now provides the ability for users to send *Notices* (also known as a small message/note) to other users. *Notices* can be queued to be sent later as a reminder to the recipients, and can be sent to user groups as well. In order to send a notice, a user needs to have the Send Notices privilege enabled, and be in a user group with other users, who can then receive notices from that user.

Enhancements

- Adjusted the default SSL cipher suites that are supported by IBM Safer Payments . It affects new installations only. The settings can still be changed to accommodate individual customer needs.
- Cases can now be directly created from case search and the case creation page is opened within a pop-up window and pre-filled with search parameters. Also, a new checkbox **goToCase** was added to the case creation page. It allows to redirect the investigator to the case page once the new case is created or aggregated. This functionality is also available from the case search and from the query result table.
- Categories for numeric inputs and outputs can now be defined for ranges of values. Categories on single values are still possible and both types can be imported via a csv file. Refer to the online Help for more information.
- It is now possible to require an additional confirmation when manually sending certain case actions. For this, a new setting **requires confirmation** must be enabled on the case action in question. When sending one or more case actions from the case investigation screen, an additional confirmation dialog is shown if this setting is enabled in at least one of the selected actions.

- A new report type Fraud Marking Report is added. It supports analyzing investigators' fraud markings. This report is only exportable as CSV and contains a list of all the Fraud Markings that occurred over a selected time period.
- It is now possible to mark individual transaction records as fraud or genuine by using a dropdown menu on the fraud attribute column within a query result. This feature must first be enabled in the system configuration and a default fraud timestamp attribute can be selected. Fraud marking via the dropdown menu is instantaneous. No additional confirmation is required by the user.
- A new setting for attributes allows to enable extended logging for attributes that are not encrypted. For all queries that contain such attributes, a log entry is created in the audit event log, which contains detailed information on the execution and data selection. It provides the ability to review who/when had access to this attribute in order to be compliant with data security regulations.
- It is now possible to group cases irrespective of case classes or working queues by using a new element called **case type**. A case type is defined on the **Administration** tab and specifies an owning mandator, a priority, a color, and a set of case conditions. Any case belonging to the mandator of the case type or one of its submandators is assigned to that case type, if the case fulfills its conditions. The case type is then displayed as an extra table column on the **Case selection** and **Case search** pages and in the **Case histories** widget within a case.

If a case fulfills the conditions of more than one case type, only the one with the highest priority is displayed.

Additionally, the **Case selection** page now offers a case type filter. If one or more case types are selected, a case has to fulfill all of their conditions to be included in the result.

- In IBM Safer Payments user interface, it is now possible to have no digit group separator to display numerical values in form items and tables by selecting none for digit group separator dropdown in the my account form. Also, digit group separator could be set as none for newly created user by using the user account form under Administration tab.
- The case investigation screen was extended with a new section named **case action history**. It provides an overview of all case actions that are executed for the currently viewed case. Aggregated views are also available by using a reporting attribute selection the same way that case histories and aggregated case audit trails offer.

The new section allows manually adding new entries to the table, which makes it possible to enter manual results for a previously sent case action. Imagine that use a file case action to generate a letter that is then sent to the owner of a given account, previously there was no direct way of documenting the account owner's reaction to the letter within the case. With the new functionality, an investigator can add a new entry to the case action history, one that refers to the previously sent case action and contains a comment explaining the results of the action.

The API request `addCaseActionHistoryEntry` can be executed by any investigator that has the privilege to send out case actions, but also by user accounts that have a specific case action history privilege only. This way an external system can perform this request as well, using a user with only that one privilege.

Additionally we now support multi-line comments when sending out case actions, or when adding a new custom entry to the case action history. To make these comments easier to read, they can now be opened in small pop-up window by using a button within the comment's table cell. This button was also added to the case audit trail.

- OpenSSL was updated to version 1.1.1g.
- When creating attribute categories, a color can be assigned to each category. This color is displayed alongside the category value in query and master data query results as well as in tables containing cases.
- The IBM Safer Payments External Queries functionality is enhanced in the following ways:
 - It is now possible for IBM Safer Payments to parse JSON responses from external systems.
 - It is now possible to send back a table response representing data that is not stored within IBM Safer Payments to be displayed within a case.

- A new checkbox called **Open investigation in new window** was added to the user account settings. With this enabled, several pages on the investigation tab open in a new tab or new window, depending on browser settings. The setting affects the following:
 - Opening a case from a table row in case selection and case search or from within the case when clicking a table row in the case histories and audit trail sections.
 - Opening any of the left navigation items belonging to the **Queries** section on the investigation tab.
 - Executing an investigation query opens the result in a new window.

Update information

IBM Safer Payments 6.3.0.00 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [IBM Safer Payments Knowledge Database Technical Note \(archived releases\)](#)

6.3.0.00 Update information

- All existing modeling workflows in all existing revisions will be properly modified by irreversible removing all rule generation entries and saved back to the disk during first initial IBM Safer Payments startup. This action is logged with log message ID 749.
- Due to the necessary changes to signal handling, writing backtraces in case of a crash works differently. Files for backtraces are no longer written into one file per day called `backtrace_log_[InstanceID]_[YYYY-MM-DD].iris`, but to two different places:

1) Backtraces are written into a file that opened at startup of IBM Safer Payments called `backtraces_starting_at_[InstanceID]_[YYYY-MM-DD].iris`. Once IBM Safer Payments is started, this file is created and contains all backtraces that are created since startup. A new file with a new date is created once IBM Safer Payments is restarted. This file is created no matter if there is a backtrace or not. If you find empty files like this after updating, everything is okay. If you have automated file management processes around the IBM Safer Payments configuration, especially log folders, make sure that those files are not moved or deleted while IBM Safer Payments is running.

2) Backtraces are also written to standard error (stderr) of the process. Make sure that you store the stderr of the IBM Safer Payments process. If you use systemd services to manage IBM Safer Payments, it is written to syslog that usually ends up in /var/log/messages or journald using journalctl -u [servicename].

- Defined risk list files in the configuration folder are corrected, if a file contains invalid JSON encoding in the audit trail. No further action is required.
- Due to an improvement of incoming FLI performance, after the update of a remote instance, an existing FLI buffer might get synchronized substantially faster than before. If deferred writing is enabled, the minimum MDC size of deferred writing settings might need to be adjusted so that they take the improved FLI speed into account. Contact IBM Safer Payments support if you have questions.
- Cluster page context actions reflect to the cluster.iris file, regardless of whether a remote instance refused the cluster configuration change.
- When OIDC is enabled, it was possible to send API requests without doing an explicit login. It is fixed and now it is required that the user first do a login before sending any other API requests and should also include the session ID in the following requests.
- The logout call of the new UI was changed from POST back to GET. If you are monitoring the IBM Safer Payments calls through a proxy, then you need to ensure that you update the pattern for the logout call.
- If you used the getDefaultMaskEncryptedValues API request in any script, you must change this script. There is no real replacement here, since the setting really did not serve any purpose except initializing the corresponding setting of a new outgoing channel configuration. So at most you might want to request a specific outgoing channel configuration from the server and check its **maskAttributeValues** setting.
- Make sure that there were no log messages ID 742 - which indicate missing Python functions - in the last startup logs of the instances. If such messages occurred, resolve the missing Python functions. Otherwise, starting up with this version is prevented.
- The base path to the IBM Safer Payments new user interface is changed. It was previously available at /sp/, but now it is available at the root path /. The new *base path* parameter can be used to allow the path to be set to a custom value, in combination with a reverse proxy. If you are currently using a reverse proxy, then you might need to update the configuration as the API requests for the new user interface are now based on this base path.
- PMML Predicates on numeric fields are now always calculated as IEEE 754 double precision values. Due to rounding errors, some results might be different compare to previous versions of IBM Safer Payments.
- The XML parsing of external queries is updated. Previously, it was possible to send invalid XML as the response to a IBM Safer Payments External Query and IBM Safer Payments would still accept it. This now results in an error. Check your external queries and ensure that all elements in the response are wrapped in a valid root node.

Additionally, the element name SP_EXTERNAL_QUERY_RESPONSE is now a reserved element name, so if you previously used this element name as your root node, then you must change your root name to another name or update your response to match the new expected format.

- When a merging finds and recomputes a target record, the source record is not stored. In previous releases the source was stored when a merging with the store source setting did not find a target, but a subsequent merging found and recomputed the target.
- For SQL statements written by RDI for alerted cases a column INSTANCE_ID was added to the insert statement of the HITTINGURID table. Also, the column HITTINGURID was renamed to URID. So for existing HITTINGURID SQL tables, add a column INSTANCE_ID and rename column HITTINGURID to URID.
- The log folder now contains latency report files in addition to audit and system event logs, in case latency reporting is enabled and latency violations happened in previous days. If external scripts or jobs are used to delete log files after a certain time, those scripts must be checked or adjusted in order to also delete the outdated latency report files. The file name structure is latency_log_[instance_id]_[yyyy-mm-dd].iris.

From IBM Safer Payments versions 6.0.0.07, 6.1.0.05 and 6.2.0.01, the setting **Clear latency entries during eod** was removed. The option is now redundant because the reports are archived to files. The latencies are cleared from system internals during end of day job.

Change log

IBM Safer Payments 6.3.0.00 includes critical, major, and minor bug fixes and APARs.

Critical changes

- Rule generation is temporarily removed and is no longer supported as a modeling workflow entry type.
- The system was likely to fail when performing structural golives while the MCI bypass was enabled for that instance.
- Updating the data selection in Random Forest (RF) generator might result in invalid memory access. There were no data leaks, but segmentation faults might occur (APAR PO09238).
- When a golive is performed on a revision that already has a PMML model in the current champion of the same mandator, an unrecoverable error of `F 0099 Internal error in Pmm1Model::computeRealtime() for PMML model` might be printed in the log and the PMML model will not compute after the golive. If a simulation is performed on the same revision before such golive, the application might also fail (APAR PO09172).
- Attribute references of internal random forests were duplicated with each golive. This was causing exponential growth in size of the model revision files, and long time to copy revisions or start an instance. Existing duplicate entries are removed during the startup with this IBM Safer Payments version (APAR PO08987).
- Potential fail when executing an investigator report before and after a new case state was added to the configuration (APAR PO08984).
- It was possible that during the end of day job, invalid memory was accessed when cases were aggregated in parallel. There were no data leaks, but segmentation faults might occur.
- The application might fail when using hard timeouts for Python callouts (APAR PO09000).
- A caching system for the user interface (UI) static files is added and the static UI files are now delivered in a bundled version. It can significantly improve the loading time when IBM Safer Payments is deployed on a network with high latency. Some configurations can see up to 10x improvement in loading times (APAR PO08557).
- Transactions containing future timestamp might cause issues in profilings that use a reference timestamp such as calendars and events. A possibility to discard or alter these future timestamps was added.
- The user interface checks the correct privileges while marking transactions.
- An unneeded request `benchmarkDiskSubsystem` was removed.
- Ruleset conditions are now shown under the rules form.
- My Working Queues page can be accessed again.
- Due to a validation error, the user interface would not allow profiling items to be saved.

Major changes

- When a user changed the password, IBM Safer Payments did not invalidate the old session ID and other session-related tokens.
- It was not possible to set masterdata from a masterdata query.
- External model components produced sequence loops on remote instances causing data inconsistencies.
- Latency reporting was enhanced in the following ways and the new functionality can be set up in system configuration (APAR PO09290):

- Writing latency reports might negatively impact the overall latency of a record and the CPU usage. To avoid this issue, it is now done asynchronously.
- It is now possible to write latencies to a log file as they happen. Previously only the last latencies available in memory might be written to log during end of day job, older latencies were lost.
- The amount of text that is written for a latency report to memory and to log file was reduced. It does not negatively impact the data system internals shows in latency report.
- It is possible to limit the number of processing elements (for example, counters, rules and so on) in the latency report to the most time consuming elements.
- It was not possible to enable SSL options for the MCI bypass (APAR PO09349).
- In the new user interface, if there are no rows in the report while making a revision golive and if there were any previously displayed rows in the **Golive report** table, then those rows are not removed from the table. It is fixed now so that the **Golive report** table content can be correctly refreshed to display current report status of the revision.
- Memory associated to a rule was not freed when the rule was deleted or its performance report was unchecked after a golive was done in the parent mandator (APAR PO09245).
- During an upgrade of IBM Safer Payments , the Last Action On of the cases being worked upon were set to an invalid timestamp. In consequence, these cases that are worked on during the upgrade were archived by the next end of day job.
- The new user interface now correctly handles conclusions with timestamp attributes where the expression would contain constant values including w, d, m, h. For example, 4w (APAR PO09313).
- Starting up of IBM Safer Payments v6.2.1.02 fails when a PMML model with unmapped transformation fields was created with a lower version (APAR PO09299).
- External callouts fail to parse the response if more than one response is received at the same time.
- Because of rare occasions of missing backtraces in case of a crash, the signal-handling code of IBM Safer Payments is refactored (APAR PO08923).
- In the new user interface, a user without the privilege to edit indexes was not allowed to edit counters (APAR PO09243).
- A fail might occur when stopping rule generation while a simulation was running for this revision (APAR PO09188).
- When profiles are in real-time computation path, performance was severely impacted, resulting in latency to increase by ~10x (APAR PO09201).
- When saving the settings form, if the save button was pressed more than once (for example, accidentally double-clicked) then it was possible for some of the values to be saved incorrectly (APAR PO09200).
- The investigator report showed incorrect results as actions were counted multiple times. The audit trail entries in the investigator report must be counted based on the final state of the cases (APAR PO09158).
- Import Risk List Download report displays stats that are gathered from mandators other than the primary one currently in use or head mandators (APAR PO09275).
- When executing a missed cases report, there was an unnecessary long period that might lead to blocking, for example, for golives or updates of elements that happened at the same time (APAR PO09117).
- Persistent connection OCC reset leads to crash.
- Introduced checkboxes in the settings to make the checks on IP address and on the HTTP header X-Forwarded-for optional during session binding.
- Restoring and shutting down an instance might result in a backtrace in rare cases. Data integrity was not affected, as the backtrace was after files were closed.
- Improved logs when MCI connections are opened and closed. Including the IP address and port number when MCI connection is opened. Log connection ID (instead of thread pool position) on both opening and closing of MCI connections.

- Possible deadlock when doing a golive while a simulation is running in the same mandator or in a child mandator (APAR PO09377)
- When using conditions in the new user interface, the `is empty` and `is not empty` operators for text input attributes were always evaluated to `false` if `ignore case` was selected. There was no issue when evaluating the input attribute with `case-sensitive`. In the old user interface, the comparison was always set to `case-sensitive`. This is fixed in the new user interface. On selection of the `is empty` and `is not empty` operator, the drop-down of `case-sensitive` is removed in the conditions section of the form in Rules (APAR PO09276).
- URI case actions might expose values of encrypted attributes to an external system, for example, a web server. This might happen when the case action used encrypted attributes in its message template. When executed by a user with the privilege to view clear values for encrypted attributes, the generated URI would contain those clear values potentially forwarding them to an external system. Several warnings were added to the application to reduce the likelihood of such data leaks. Whenever a case action with a potentially problematic configuration is opened, the user interface shows a warning to the user. Whenever such a case action is executed, even just for testing purposes, a log message is generated. For PCI DSS compliant environments, this log message must be enabled. Furthermore, the built-in PCI DSS report contains a warning for any URI case action that uses at least one encrypted attribute in its message template.
- Models containing at least one external model component produced invalid results for calendar elements since the calendar counted each transaction twice.
- New analysis might be saved without selecting a proper data range type and was leading to crashes when executing these analyses (APAR PO09306).
- Added a condition to prevent check for the sampling condition when `samplingStrategy` is `No`.
- Added a condition to prevent unnecessary API calls.
- In the new user interface, a newly created user might see `No privileges to perform this action` after saving my account form. It was due to a redundant server call that was not required while saving it (APAR PO09054).
- The MCI bypass connection did not produce a response for messages with message IDs of less than 16 characters. The transaction message was still computed though.
- When a structural golive failed with a crash, it was possible that other instances have already been informed about the golive and will also fail once they perform this golive themselves.
- Hyperlink queries were not able to refresh in the main window.
- Log message IDs 131, 408 and 535 were used incorrectly.
- Added online Help about logical golives.
- Attribute values were printed without formatting within table constructs inside a DOCX case action (APAR PO08606).
- The MCI bypass failed for transactions that delivered their message ID within the IRIS tag of a flat XML message. Other message types were not affected, as well as flat XML messages that use the `x-sp-message-id` HTTP header.
- It was possible to delete compliance lists that were still referenced by a sanction list job and might then lead to an invalidation of a golive. The find reference functionality was introduced for compliance lists (APAR PO09155).
- In the new user interface, the validation of the `reset value` conclusion operator falsely required a right-hand side expression to be entered (APAR PO09252).
- Console messages for Text not found were coming in production (APAR PO09192).
- It was not possible to download simulation query results in the new user interface with `Encrypt sensitive exports` enabled (APAR PO09254).
- Navigating from a simulation query to any other page can produce log message of API request `'unreserve'` failed with `'F, ITEM_NOT_FOUND'` `unreserve uid: NNNN` (APAR PO09203).
- A condition is added to stop the `Stop pending message` popup when we disable a persistent connection type OCC as it does not makes sense for them.

- Golive runs on multiple instances at the same time with default configuration.
- It was not possible to create Masterdata or Mergings with the option **forward to external system** when the model did not contain any overwritable input attributes. This was because the **forward to external system** section required at least one response message mapping to be defined although it must have been optional.
- The Case Management tab was visible and enabled even if case investigation was disabled for a user.
- There was no feedback after saving changes to the revision general page in the new user interface. Also, the keyboard shortcut for saving (CTRL + S) was not working.
- The case creation page flickered when changing the mandator or case class selection, which was due to the page needlessly switching to a loading state.
- If a new load file job was created with a message that had the option Monitor latency disabled, then this option was enabled later, the latencies were not monitored while running the job (APAR PO09194).
- We added a log message with number 822 whenever starting a report (case queue report, investigation report, missed cases report, user report) and number 823 whenever a report finishes. We also added further details to condition and conclusion log messages.
- After an instance was restored, it was possible for the heartbeat thread to not be able to reconnect, which resulted in numerous SCI messages in the logs (APAR PO09005).
- There was a bug in the internal error-handling code, which meant that some null pointer exceptions might result in crashes. It is fixed so that they print an error and a backtrace, but do not cause a fail (APAR PO09327).
- When a logical golive was overlapped with the deferred writer, the deferred writer might be stopped during the logical golive and might not start again afterwards (APAR PO09202).
- A detection mechanism for sequence loops in simulation of precedents and counters is introduced. It prevents simulation from being stuck because of the sequence loops (APAR PO09130).
- Deadlock when end of day job was running and case escalation happened at the same time (APAR PO09213).
- The API request isOffline reported a wrong status when the instance in question used deferred writing. Even after a successful execution of the API request setOffline on such an instance, the isOffline request would return the status INSTANCE_IS_FINISHING_DEFERRED_WRITING, although deferred writing was already done by that time (APAR PO09148).
- The API requests setOffline and setOnline behaved differently depending on which instance they were sent to. When being sent to the API port of the instance in question, deferred writing of that instance would be stopped properly. When the request is sent to a different instance for example, the API instance, the deferred writer would be paused, causing some data to still be in flight and missing on disk (APAR PO09149).
- External Model Components allow the HTTP headers to be configured with static values or attribute placeholders from which the value is read and forwarded in the header.
- FLI performance was significantly improved for incoming connections (APAR PO09242).
- When a persistent connection was disconnected by the remote side, every reconnection attempt was logged. It might lead to an excessive number of log messages when the connection mightn't be reestablished.
- A redundant option **forward to external system** inside of mergings is removed. Using an external model component by having either **store source** or **recompute target** enabled in the merging enforces a configuration that is easier to maintain.
- When attempting to upload a PMML model with many Data Field Mappings, the new UI might fail (APAR PO09185).
- The check whether an output attribute is empty was incorrect in simulation. This impacted conditions and pmml computation (APAR PO09262).
- When instances were detached or deleted from a cluster, it was possible that a problem within the heartbeat functionality resulted in a crash.

- PMML model parsing failed if a model references an output field of a previous model inside a model chain (APAR PO09219).
- PMML model parsing failed if it contains a `DerivedField` without a name. The PMML standard explicitly allows it to happen outside of a `TransformationDictionary` or `LocalTransformations`. For example, inside a `NeuralInput` of a neural network (APAR PO09218).
- PMML model parsing fails if a `DerivedField`, which was defined in the global `TransformationDictionary`, was referenced anywhere in the model file (APAR PO09217).
- While resizing a column in the CPP query result page, the new user interface froze or crashed due to infinite updates of the table component.
- When an instance was removed from a cluster, the instances still kept sending heartbeat status to it. Now the heartbeat stops once the instance is removed from the cluster.
- The log message ID for undefined API requests of MCI endpoint and message command interface was 768, but must be 118. Log message of mci endpoint only mentioned message command interface.
- The instance list in the MCI bypass settings might not be sorted and clicking on one checkbox sometimes affected the state of another.
- When enabling or disabling an outgoing channel configuration of type `persistent connection` while transactions are being processed by using that connection, an invalid memory access might occur causing the instance to crash.
- The system might fail when running rule generation on remote instance (APAR PO08947).
- When the length of an attribute and the categories were saved at the same time, simulation was not invalidated. Then, if a simulation query was run on the invalidated simulation data, it was possible for the instance to fail (APAR PO09161).
- When retrieving an outgoing channel configuration through the user interface, an API request or when writing out the configuration to disk, invalid memory might be accessed. It happened only when the configuration file of the outgoing channel contained invalid instance uids in its `connectionPoolPriorities` field.
- When using an external model component with unused response message mappings, synchronization of the response mappings fails completely and the transaction record becomes inconsistent between the primary instance and the other instances.
- When transaction is sent that changes masterdata for an index, and it does not contain the XML tags for a Boolean masterdata (for example, because it's not changing that value), the masterdata is reset to False (APAR PO09137).
- IBM Safer Payments is guarded against a potential fail when an MCI SSL socket was shut down due to inactivity (APAR PO09041).
- FLI rate dropped during FLI retry connection at random times causing higher buffering rate than sending rate (APAR PO09146).
- Context actions on the cluster table, for example, **Enable API/ Disable MCI**, and so on, do not write changes to file. The problem occurs if any of the instances in the cluster rejected the change, for example, during a feature upgrade scenario (APAR PO09088).
- It was not possible to create a job of type `export data` because the `salt` field was not initialized with valid random data.
- An instance might fail when deferred writing overlapped in a bad way with a rule action overwriting a defined risk list entry (APAR PO09124).
- Records imported via load file jobs showed incorrect (too high) misc wait time and overall latency in latency report. It might lead to each record causing a latency, which results in higher CPU usage and in turn higher actual latencies (APAR PO08816).
- Long body in model component is managed by adding a scroll (APAR PO09373).
- If the mask level of the user was set to `may see masked values`, the index queries and masterdata query on the case investigation page did not display any records. It was because the wrong lookup function was used on the back-end.
- NaN is shown in FLI status.

- The decimal digits for hours are displayed with decimal digits now for execution time for Job Schedule under Administration.
- The prioritization settings on the system configuration page were showing up empty instead of displaying the selected values.
- Golives that increased the size of the sequence attribute might result in an application fail if the index conditions allow only a subset of all messages being sent to the application to be inserted in the index (APAR PO09075).
- In the new user interface, using a loop construct for regular cases in a case action template does not render the correct values depending on what transactions are added to the case action. For example, when adding transactions from the Alerted transaction, the preview renders the Amount field as [object Object]. When adding transactions from an embedded index query, the preview displays the amount value from the highlighted alerted transaction for each selected transaction instead of the original transaction. These two issues are fixed.
- The startup parameter limit_index is now applied to multi value masterdata. Using this start parameter, the size of the masterdata is the capacity of the multi value masterdata multiplied with the limited index size.
- OCC templates can be modified by several threads, for example, being updated while being read in a case action, which might lead to a fail in rare cases (APAR PO09037).
- When using OIDC, if a user logged in to two browsers at once and then logged out in one of the browser tabs, it was possible for the user interface to hang and display a white screen (APAR PO09136).
- In the new user interface, in the mappings page, the table's performance becomes very slow while resizing the column and there are large number of messages. It might also cause the browser to crash. Out of the three tabs (Input attributes, Output attributes, and All attributes), now only the active tab's content is rendered (APAR PO09180).
- When using the **execute** button to perform a save and execute on a new query, the user interface reported Requested item not found instead of showing the result of the new query.
- In the new user interface, when there are many KPIs displayed in charts on the Dashboard page, for example, with combined number of data points more than 30000 data points, it would take 1 - 2 minutes to initially load the page. This fix addresses the issue and improved the performance of the dashboard page to load within 30 seconds with 30000 data points.
- Added a **Hide Logout** setting to the Authentication Settings, which appears when OIDC, LDAP with SSO, or LDAP & Local with SSO are selected. Enabling this setting hides the logout button (APAR PO08859).
- Only the last child was parsed in a nested xml structure with multiple layers.
- Some files were not being cached. We introduced the ETag header to allow for caching of these files.
- The logout call from the new user interface was changed from POST back to GET.
- It was possible for some KMI threads to not properly stop if the KMI was started and stopped very quickly (APAR PO09008).
- When using case aggregation history, the highlighting of the most important alarm did not work as documented. Instead of highlighting only the most important alarm, for example, the most recent alarm with the highest score, the old user interface highlighted all alarms with the highest score. However, the new user interface highlighted only the most recent alarm even if it did not have the highest score.
- Dropdown text is not fully visible in confirmation message box during shutdown of a cluster instance.
- The system configuration setting **mask values in notifications and case actions** was meaningless as the **mask values** setting in each individual outgoing channel configuration overwrote it. Therefore, we removed the system configuration setting along with the getDefaultMaskEncryptedValues API request that retrieved it. The PCI DSS report now checks the **mask values** setting of each outgoing channel configuration individually and contain a warning for each channel that does not mask outgoing values.
- Defined Risk List Entries Table showed expiresAt data even when the expires at is unchecked in Defined Risk List.

- Golives that increased the system time attribute might result in an application fail if a submandator owns rules that were enabled for performance reports (APAR PO09024).
- Retention by time: Status Alarm Indicator and Key Performance Indicator might show infinity or negative numbers for retention usage and decimal numbers are not displayed for Key Performance Indicator.
- Retention by time: Total annual transaction volume including all mandators must be greater than zero because end of day job can hang if retention by time is enabled and total annual transaction volume is zero.
- The startup of the application is prevented in case Python callouts cannot be resolved that are referenced in the model. For debug purposes, a startup parameter was introduced. When starting up with `ignore_python_errors`, it is still possible to start with missing Python functions. This startup parameter must not be used in production as missing Python modules can lead to crashes during golive.
- MCI connection overflow can cause the processing thread to hang (APAR PO09131).
- There was a possibility of a wrong outcome when evaluating case masterdata conditions of data type text.
- In the new user interface, in any profiling page such as counters, calendars, etc, when a user quickly selected a profiling one after another before the previously selected profiling was loaded completely, then the attribute of the previous profiling item would be displayed as the current one. Upon saving the current profiling, the previous profiling's attribute would be saved for the current profiling. It led to same attribute being referred in two profilings (APAR PO09066).
- The column width preference was lost upon sorting a table.
- IBM Safer Payments can now calculate detailed latencies that previously were only combined under **Misc Wait Times**. To enable it, turn on **Log misc wait time details** in system configuration.
- The end of day job was trying to access case attachments that have been wiped causing an exception.
- It was not possible to define masterdata on a time interval attribute when using a peer index (APAR PO09003).
- The System Internals page did not show any information about the availability of the WebSphere® MQ functionality on a given IBM Safer Payments instance.
- The LastActionOn from Case was not updated in case, when a case action is triggered (APAR PO09091).
- Masterdata values with decimals did not show up in the hit condition values table of cases created by an index based evaluation.
- External callouts in external model components, mergings, or masterdata did not work with third party services.
- Deletion of attributes in calendar form in the new user interface was not possible as the delete button was always unavailable.
- When using the Kafka Message Interface (KMI), there were some cases where disabling the KMI from the cluster settings table context menu would not result in the message processing failing over to the next priority instances (APAR PO09004).
- Case alarms that were created and aggregated on a remote instance did not show up in the case on the local (API) instance. Additionally, the highlighting in the **consolidated alarms** table was wrong as it always highlighted the most recent alarm instead of the one with the highest score.
- Jobs that have the curtail masterdata option checked, might not be executed (APAR PO09110).
- When a simulation query with conditions on data selection was running and the user enabled the checkbox to use the simulation data, a fail can occur.
- If multiple masterdata elements for an index were linked to the same output attribute, the values of these masterdatas were not shown correctly in the masterdata query result.
- The case attachments table preference was stored for each case individually, which resulted in many preferences being stored in the user's file. Since these files are transferred over the FLI often, their increased size slowed down the overall synchronization speed of the cluster. We changed the behavior of the software to now store only a single user preference for this table. If you encountered this

problem, it is recommended to reset the user preferences of each account that opened many cases in the past. Preferences can be reset for each user individually on that user's **my account** page. A global reset for all users can be done by using the maintenance function **reset user preferences** (APAR PO08878).

- A deadlock was possible when starting the rule generator right after the instance was started and when the rule generator then ran into an error or was manually stopped at a bad time.
- Golives that changed the system time attribute from not being stored to being stored resulted in an application fail if rules existed that were enabled for performance reports.
- The expression under condition or conclusion in merging was not showing attributes at multiple instances, for example, when the page reloads after creation of new merging (APAR PO09139).
- fail (segmentation fault) might happen when sending the logout API request more than once in parallel (APAR PO08887).
- Some reporting attributes within a case might wrongly show empty values if the reporting attribute was added to the case class after the case was created and if a numeric index was used as remote lookup index.
- After a masterkey change, encrypted values in revision audit trail files were not reencrypted with the new key and created parser errors when viewing them (APAR PO08961)
- Retention by Time: Unable to specify expected annual transactions per mandator.
- A condition with preceding zeros in the numeric expression and operators `endsWith`, `starts With` or `contains` might compute incorrectly because the zeros were not taken into account. For example, condition `NumericAttribute->endsWith->06` returned true instead of false for attribute value 456 (APAR PO08400).
- In the model revision page of the IBM Safer Payments user interface, sharing the revision from the general tab does not hide the modelling option from the left side navigation. This fix refreshes the left side navigation menu after sharing the revision
- Due to a defect in API calls, revision comparison showed undefined values (APAR PO08922).
- In the conclusions section in rules, on selection of a numeric attribute the user is not able to pass a string parameter in a Python function.
- It was not possible to use Python functions in rule conclusions on the new user interface.
- After a master key change, group by query conditions that include encrypted attributes were not reencrypted correctly and thus no longer usable (APAR PO08968).
- In merging conclusions, attributes that were not stored in MDC or DDC might not be selected.
- In conditions form, saving an interval expression does not remove letters t, n, and r when they are provided as first letter in the interval value. For example, `tue~thu` (APAR PO08944).
- We resolved rare race conditions that might lead to crashes when operating rule generation or random forest generation while disabling simulation at the same time. The crashes might happen when starting rule generation while disabling simulation or when committing a condition while disabling simulation or when disabling simulation while random forest generation is running.
- When selecting a new value for the **mask level** field on the user account form, the field still showed the old value. The new value was still being set invisible to the user, so saving it still worked properly (APAR PO09020).
- There was a possibility that a FLI connection is simultaneously sending two messages. It might result in a FastLink acknowledge error and to duplicate transactions on the remote instance. The probability of this bug was increased when using many FLI threads (APAR PO09011).
- Various changes to the help section, including fixing links and images.
- It can now dynamically change the path of the images in the internal help window based on the version folder name.
- After Investigation - Cases- Send case action was disabled from Admin - roles, the case investigation was not accessible because of a pop-up error message about no privileges.

- A csv download functionality is now available for all tables. The download contains the data shown to the user, incorporating filter settings, and the appropriate formatting. Exceptions are tables with encrypted data. They still provide only an encrypted .zip file download (APAR PO09120).
- The computation of a compliance list might fail in rare cases during real-time computation when using the `starts` with option or when searching entries manually (APAR PO08909).
- Counters, precedents, and patterns did not evaluate the index sequence during recomputation after a merging, resulting in incorrect output values (APAR PO08530).
- Status alarm indicator's email form now allows multiple email addresses in the **To** field (APAR PO08890).
- In the new user interface, Python scripts are not shown as suggestions in conclusions.
- Remote instance execution of rule changes was too slow, which caused severe slowdown in FLI synchronization (APAR PO08938).
- The Sorting of the Amount column in case investigation and the query results was not working correctly. Also, the dimension or the currency symbol was missing in those tables (APAR PO09184).
- IBM Safer Payments would fail when an MCI socket was shut down for two different reasons at the same time. It was only possible when MCI was operating through SSL (APAR PO08908).
- It was not possible to use the new user interface when it was placed behind a reverse proxy. It is now possible by setting the `basepath` property in the instance API settings. All API instances must be set to the same `basepath` (APAR PO08821).
- When saving a load file job while it was running on a remote instance, the remote instance potentially crashed (APAR PO08966).
- When aggregating audit trails for a case, the result might have been incomplete if the aggregated cases still contained unloaded audit trails entries on disk. Therefore, they were not loaded from disk during aggregation and not included in the result.
- It was not possible to edit a case workflow that was copied from the default workflow.
- Attributes were not available in transaction message conditions while creating a status alarm indicator of type transaction message rate.
- Numeric attributes in tables are now aligning to the right.
- On the new user interface, the MDC/DDC might not have a value higher than 2,147,483,647 in some forms.
- Batch job files can now be loaded from NFSv4 shares. Note: NFSv3 shares were always working in Red Hat version until 7.3 and since Red Hat version from 7.4 kernel-3.10.0-693.18.1.el7.
- Character encoding conversion was not working for load file jobs.
- A fail might occur when executing maintenance function `resetOutgoingFlt` in fast succession.
- Whenever a defined risk list name contains a backslash or quotes, it is now correctly escaped to prevent parser errors in the risk list audit trail (APAR PO08865).
- A deadlock might occur when a revision was updated, erased, or unreserved while a simulation was running for this revision (APAR PO08834).
- When deferred writing was enabled, the creation of RDI files was bound to the general deferred writing cycle instead of the cycle selected in Mandator settings. This is changed by creating a separate deferred writing thread for RDI files (APAR PO08782).
- Memory consumption of tree-based PMML models (Decision Tree, Random Forest) was decreased (APAR PO08652).
- When a PMML model file that had transformations was loaded in a IBM Safer Payments version below 6.1.x, after upgrading to 6.1.x or higher the system potentially crashed during computation of the model in realtime path or simulation (APAR PO08850).
- The application might fail when simulation was stopped shortly before finishing computing (APAR PO08907).

- On the new user interface, when viewing a data export job that exports encrypted data with a user that is not allowed to change jobs, the **salt** field showed garbage values instead of a proper hint to the user about not having the privileges to view the salt.
- In some cases, times entered in data selections of the old user interface show different times in the new user interface.
- In the new user interface, the user was not able to edit the time in **Defined risk list entry Expires** field.
- Copying a ruleset to another revision resulted in malformed masterdata rule actions (APAR PO08913).
- On the new user interface, when defining a substring preprocessing in mappings, users might not start on the first character of a string.
- In reporting query results, the performance indicator and amount have been fixed to show decimal precision.
- A fail might occur while marking transactions as fraud or genuine in case investigation page if there are more than one query available for the case class.
- After saving a memo or CPP within case investigation, the context menu in alerted transactions table no longer displayed (APAR PO08935).
- When an instance started up, it read all the entries in the retention audit trail and displayed them on the retention page. It might potentially lead to decreased performance on the retention page when the audit trails became too large.
- When a revision was created on the API Instance by copying a source revision that was assigned to a remote instance simulation, an error occurred when opening this new challenger revision (APAR PO08793).
- The instance might fail when `delete index entry` was executed from masterdata query result on an index that originally had a sequence, but the sequence was later removed (APAR PO08751).
- A performance decrease in queries and purging of index nodes was fixed, which was introduced in versions 5.7.0.10, 6.0.0.07, 6.1.0.05 and 6.2.0.00 as part of a change to make sure that queries do not block golives and configuration updates (APAR PO08925).
- When performing changes on the retention administration page, the whole audit trail was synchronized to other instances in the cluster. It might potentially lead to decreased performance on the retention page, if the audit trails became too large.
- Values were potentially shown in wrong columns in reporting query.
- Values were displayed with incorrect decimal values. The issue is fixed by passing the decimal as a parameter. So that the correct function is hit.
- When retention by time was enabled, the indexes table still showed the sequence's MDC and DDC records capacity instead of its MDC and DDC retention.
- Using case search with encrypted attributes would yield no search results and disable further access to the case search page (APAR PO08871).
- On the new user interface, it was not possible to have values less than zero as ratio in sampling.
- Under rare circumstances an instance might fail when two users ran the same report (investigation, investigator, case queue or missed cases report) at the same time (APAR PO08911).
- When a FLI message was written exactly 17 bytes before the end of the buffer file, which means the message header exactly fit at the end of the buffer, the FLI buffer was corrupted. Additionally, a misleading log error was printed after attempting to write 0 bytes to a file (APAR PO08914).
- In the new user interface, the copy icon in the user account form was unavailable even with the correct privileges.
- The real-time computation of internally generated random forest model components was predicting the output twice instead of once, thus increased the latency to compute a transaction.
- It was not possible to download files from the old user interface when IBM Safer Payments was used behind a reverse proxy (APAR PO08837).
- When rules that contain Python functions returning a string within a conclusion were triggered, instances might crash. This is the case for Python versions greater than 3 (APAR PO08815).

- The online help of Calendar profiles did not mention that the setting **Update calendar profiles and events** must be enabled in all mergings that have conclusions that use the calendar profiles' amount or conditions attributes. It is in order to avoid unexpected values in profile output attributes (APAR PO08558).
- A fail might occur when unreserving a revision while a simulation was running for this revision on a remote instance (APAR PO08778).
- In the new user interface, the key entry permission dropdown, key management dropdown, and view unmasked data checkbox are shown in the user account form only when the Encryption is enabled. The **Log** field is also removed from the Page refresh section in system configuration page.
- The Kafka interface consumed more memory than necessary due to not cleaning it up properly.
- Numeric or timestamp conclusions wrote the value 0 instead of an empty value into the output when reading an empty value from a numeric attribute, for example, in a conclusion of Numeric Output -> is -> {Numeric Input} (APAR PO08642).
- When a user did not have the privilege for a top mandator, inside a submandator revision the user was not able to view some revision elements (such as counters, calendars and so on) that belonged to the top mandator (APAR PO08623).
- When performing a head mandator golive in between simulations of a submandator including attributes of the head mandator, the application might fail or incorrect simulation results for attributes might be produced (APAR PO08734).
- When using **forward to external system** in masterdata elements, each instance of the IBM Safer Payments cluster would perform the callout to the external system itself. It is now changed to follow the same rules as external callouts performed by external model components: The callout is only performed once on the instance computing the transaction message. Other instances take the callout related information from the FLI message that is generated by the primary instance.
- When Jobs table was opened before the startup of an instance completed, the instance might fail since the job was not yet created (APAR PO08826).
- If simulations were running during end of day jobs, they would produce invalid results afterwards. Superficially it would look like all records have been simulated but for records that were simulated after the end of day job, no revision elements (counters, calendars, etc.) were considered. The new behavior is that after a golive the end of day job performs some necessary cleanup operations on the mandators that logical golives happened on. During this, simulations that were running before will be cancelled, since the logical golive might have invalidated them. A simulation will continue after the end of day job, if no logical golive happened on its mandator and its child mandators.
- In the new user interface, the Count Records function pop-up buttons **Cancel** and **Confirm** had the same effect.
- Changing tabs in any revision element page would remove the previously displayed form below the table.
- Decimal precision in value expression of a condition is changed while changing the operator.
- Running a missed cases report during a golive might lead instances into a hanging state, which might hang a golive as well as prevent the instance from shutting down. In some cases the instance had to be killed and restored.
- When an invalidated revision was deleted during a golive, a fail might occur (APAR PO08844).
- Changing stencil name no longer causes the stencil form to re-render.
- Correctly sets the start date and expiry date for a defined risk list entry as per the start date, expiry date, and default lifetime setting of the corresponding defined risk list.
- When alarms were aggregated, the remote instance would not update the case class if the case score was lower than the currently highest score.
- On some machines with specific versions of the krb5-libs library installed for IBM Safer Payments , the instance might fail when doing an SSO login (APAR PO08885).
- During message computation, the access of attributes' internal data structures is optimized for stability.

- IBM Safer Payments might fail when performing a golive that increased MDC size of an attribute or a rule. This fail happened only when deferred writing was enabled and the golive was executed before there was any data written to the attribute or rule DDC.
- Uploading a DOCX template file for a DOCX Outgoing Channel Configuration failed with an error in the user interface.
- Improved the user interface performance of audit trail and compare revision tabs under revision control of a revision by reducing the initial load time of audit entries.
- The Amount attribute value for CPPs was saved incorrectly from a pop-up window while creating a CPP.
- During the creation of a condition with operator number of single character, invalid memory might have been read.
- The instance might fail when there was no rule generation result and the request `getRuleGenerationExplore` or `setRuleGenerationIndicator` was sent. This might, for example happen when on one browser tab the rule generation was stopped, but on another browser tab the old result was still visible and user performed the request `Explore all indicators` (APAR PO08829).
- After logical golives while transactions were coming in, an index query might access values for a record that was no longer in MDC.
- A resize of an index or profile's MDC was performed in golive, even if there was no change in size.
- Revision pages would not work on a recently updated IBM Safer Payments instance, if during the update the API interface was enabled on a different instance that still has not been updated yet. It was because during the updates all revisions were automatically assigned to run simulations on the API instance. After the update of the first instance, opening the revisions on that instance caused it try to get the revision information from the previous API instance that was still not updated. It might not handle these requests with invalid responses and led to user interface errors. The changed behavior will automatically assign the opened revisions to the current API instance in such cases.
- When saving simulation queries, the data selection was not adjusted to be within the simulation data selection when the simulation query data selection was below the simulation data selection. It was only an issue when sending the save request manually without sending `checkDataSelection` first. When using the user interface, the data selection was adjusted correctly (APAR PO08875).
- Index queries might display results for purged index values if logical golives were used before. This behavior is corrected to show empty query results for purged index values.
- Rule generation generated incorrect results for interval attributes. It is fixed now.
- User interface preferences are now cached to avoid unnecessary requests to the server when entering the page again.
- Tables will now show previously fetched content while fetching the updated version, diminishing the loading skeleton's impact on the product.
- When rebuilding an index or its sequence, the updated sequence attribute was not written to DDC when deferred writing was enabled. Thus, the values in the sequence were not persistently altered by the rebuild.
- Special characters are now correctly displayed when uploading categories through CSV.
- The instance might fail when a condition was computed that used `ignore` cases and multiple text attributes in the expression (APAR PO08817).
- The online Help for calendar projection did not correctly reflect how a projection is calculated (APAR PO08857).
- Improved performance of dashboard charts.
- SQL files generated by the RDI did not reflect attribute name changes after a golive (APAR PO08789).
- No files were generated by the RDI if the mandator name contained file system reserved characters such as forward slash (/) (APAR PO08757).
- Encryption keys form's actions are enabled / unavailable correctly.
- My account tab now gets correctly highlighted when navigating to the page.

- Index queries with peer indexes now display the sequence and aspect attribute fields.
- When alarms were aggregated, the remote instance would not update the case class if the aggregated alarm was for another case class (APAR PO08797).
- Defined risk list can now be defined with numeric output attributes that have categories.
- When parsing nested XML messages, XML attributes of the first element were not parsed. Only attributes of the following elements were parsed.
- The **Copy to** functionality now works as expected for model components.
- For the alerted cases, the SQL insert statement written by RDI did not include the instance ID in the HITTINGURID table.
- Dashboard charts height is now independent from the status alarm indicators.
- Focused form headers are no longer highlighted.
- In conditions, the `close to` operator now works correctly for timestamp attributes.
- Rules priority validation limit is corrected to 10000.
- The text *IBM* in the user interface header is removed.
- **Show complete audit trail for element** does not falsely redirect to general model page.
- Case investigation list table and Query results table now display the number of rows.
- Conditions expressions can now use decimals with the operator `contains` when the selected attribute it refers to has decimals.
- It was not possible to read from DDC of hexadecimal, ipv4, text, and time interval attributes in simulation queries when production data was available for the attribute (APAR PO08526).
- When loading transactions via jobs, the instance crashed if there was a value containing multiple spaces for an attribute with the length of 1 byte (APAR PO08719).
- New risk list entries can be created without an expiry date.
- When changing the order of Conditions or Conclusions in the new user interface, the expression field values were updated unintentionally.
- Python functions used in conclusions are now recognized when creating a new rule.
- Analyses are now shown while rule optimization is running.
- Reserve and unreserve of elements while navigating through the user interface now works correctly.
- Attribute categories can be individually deleted.
- When recomputing a target transaction after a merging, URIDs that were already written to DDC in a previous deferred writing cycle were not written to disk again. It might result in data loss for attributes that were set during recomputation (APAR PO08777).
- Merchant monitoring rules can now be saved.
- Index-based evaluation form works correctly when modifying a calendar computation, as the name field no longer corrupts other calendar computations.
- The Selected first parties tables are now opened in separate Internal windows/pop-ups, when you click on the button in **Incriminating First Parties** tab and **First Parties At Risk** tab in Investigation Case.
- It was not possible to collapse all unless you first expand all in the audit trail.
- Conclusions that use Python functions with multiple parameters can now be correctly defined.
- Latency violation reports are now archived to files in the log folder. This happens during the end of day job if latency reporting is activated and violations occurred. To view these files, export the logs folder on **System Internals** page in section **General Information**.
- Case class and investigation report results were not showing the correct symbols. Σ is used for sum and \emptyset is used for average rows.
- Data selection conditions are now validated.
- Data selection input fields behave more user-friendly and perform.
- Updated the formatting for several columns on the query statistics table.

- In some scenarios multiple queries were executed in the user interface, which had impact on the web client performance.
- Simulation queries showed an error on browser refresh.
- The average fraudulent amount column displayed as NaN.
- User interface data wouldn't refresh if an operation required a restart.
- Data selection for analysis was sometimes resetting the from and to values in the new user interface.
- On the initial page load, there was no data displayed in simulation statistics.
- Copying a profiling item that created new attributes might fail the system (APAR PO08827).
- Alarms were not aggregated into cases when the score of the alarm was lower than the score of the case (APAR PO08435).
- In the new user interface, only one value of an external query result was displayed. Also improved the styling of how external query result values are displayed.
- In the new user interface, all case investigation functionality is now available immediately after reopening a case. This resolves a bug where the case investigation screen stayed in reopen mode.
- Users are now able to insert stencil names without relicking the input field after every keystroke. This resolves a bug where the focus of the stencil name input field was lost whenever a character was typed.
- Pattern to values of records time range, filler number and filler time range were not saved properly. This was fixed.
- There might be a system freeze when running the same query simultaneously at the same fraction of a second by multiple users (APAR PO09418).

Minor changes

- Golive report does not show memory-freed messages while deleting the rule with performance report enabled.
- A more detailed explanation of the functionality was added to the help page of missed cases report.
- Defined risk list's export functionality now exports all the entries, instead of being limited by the setting **Maximum number of displayed entries** in system configuration (APAR PO09325).
- Switch to OpenSSL 1.1.1k on all versions that use OpenSSL 1.1.1.
- When revisions were retired while a remote instance was not reachable, it was possible that log message ID 480 was printed once those instances come back up. The log message was caused by invalid FLI messages for the retired revision that were created when viewing the retired revision while the remote instances were unreachable. This also affected other noneditable revisions such as invalidated challengers (APAR PO09063).
- Added online Help about LDAP SSL settings (APAR PO09209).
- Account menu in global navigation doesn't always scroll with the page and is sometimes covered by elements on the page.
- Working queues did not offer an option to include closed cases.
- The user assigned to a working queue who is not a queue manager cannot see this queue nor stored cases on the investigation tab.
- Reporting attributes placeholders were not replaced during HTML template processing while sending SMTP case action (APAR PO08390).
- Improve the dialog for the interlock on the system configuration page. A pop-up window appears when the interlock is set to permanently block IBM Safer Payments entering the maintenance mode.
- In most cases users enable **Performance report Rule** setting by default, which has considerable impact on application performance since this setting requires additional memory in MDC or DDC.
- When using OIDC authentication, the user interface sometimes showed incorrect or unexpected errors caused by wrongly handled server responses. These responses are now handled correctly and only in rare cases the user is prompted with a valid error message including instructions on how to resolve the issue (APAR PO09175).

- Some log messages showed a fatal error with event log ID 99, when it must show only standard error level. Those messages stated that a service might not be interrupted as it was not running.
- The conditions forms in the new user interface did not properly react to changes to fields outside of the conditions, even if those fields would change the available select options within the conditions.
- In the new user interface, the help icon in rules designer and generated rules table was disabled when the rule generation was in progress. It is fixed.
- The query result of a CPP query ran from the toolbar of query result table would be shown in an internal window. If there is a warning message during CPP query execution, it would be displayed as a warning notification instead of as an error pop-up as displayed earlier.
- MCI Endpoints were not enabled when MCI was re-enabled (APAR PO09103).
- When a query was changed while another user requested the queries table through the user interface or a script, it was possible that invalid memory was accessed and a segmentation fault occurred (APAR PO08795).
- The system might fail when no rule generation result existed but a request of `setRuleGenerationFollowingIndicators` or `setRuleGenerationPrecedingIndicators` was sent. It might, for example, happen when on one browser tab rule generation was stopped but on another tab the old result was still visible and the user performed request `Select this and all following intervals`.
- When opening data selection for rule generation and if no *timestamp* or *account* meta attributes existed, an error pop-up was shown that did not mention the error root cause (APAR PO08991).
- If a user's password was expired while the user was using the user interface, this user might continue working until any page refresh was performed. However, when the page refresh was done, the user interface would display only the menu bar. This fix would log out the user in such a scenario, so that the user might log in again and change the password.
- The MCI endpoints user interface might have duplicate endpoints forms.
- Client side validation for MCI Endpoints was missing.
- When creating a Key Performance Indicator of type **number of cases** in the new user interface, the dropdown to select the **case close code** was not displayed so it was not possible to create a KPI with a particular case close code.
- In the user interface, in the model components table under the model revision page, changing the status of model components by using **enable/disable** buttons in the table toolbar would change the status of those model components on the server but their status in the table was not refreshed. Therefore, the status of model components in the table in user interface was different from the one on the server.
- The functionality to stop pending messages when disabling an outgoing channel configuration was missing in the new user interface.
- The outgoing channel field inside the generate report job was getting validated even when it was unavailable while creating a generate report job.
- It was possible for an external query to not function properly until it was saved a second time.
- The system configuration setting **Clear latency entries during eod** was removed in an earlier version but the new user interface was not updated and still showed a checkbox without proper label and functionality.
- The online help for the FLI is updated.
- When retrieving the cases table while also changing preferences of the same user in parallel, it was possible to access invalid memory causing retrieving the preference to fail.
- Case score of a value larger than 6 digits showed an incorrect value due to rounding to the nearest 10th divisible in alarm score table and case data table (APAR PO08899).
- In a status alarm indicator definition, threshold fields would accept any numeric value.
- Conclusion showed dropdowns that were only applicable to conditions.
- The time range validation for patterns displayed wrong error messages.

- The last changed user and timestamp were not updated on remote instances when risk list entries were updated (APAR PO08769).
- Now **Not Synchronized** FLI state is correctly displayed in the FastLink status table in Cluster settings page.
- When a hyperlink query was opened and transaction was marked as fraud, the select field in the opening pop-up had incorrect labels.
- Event log message ID 284 is now activated by default in system log. It helps to spot when a message's computation was stopped due to duplicate sequence values.
- Categories were not displayed in Case Selection and tables of Alerted Transactions in Case Investigation.
- The Golive report message showed correct sizes of the MDC and DDC consumption, when there was a memory decrease (APAR PO08873).
- Index attributes were not listed for creating a masterdata insertion or deletion condition (APAR PO08840).
- Cases that are created by index-based evaluations did not support case histories and audit trail aggregation. The "\"reporting attributes\" selection in both of these sections was always empty.
- Simulation kept loading on the screen when the rule generation was running.
- The configurable nil value timestamp in outgoing channel configuration was changed to allow 19 characters in order to support standard timestamp definitions (APAR PO09009).
- Fixed a user interface error while loading the dashboard page immediately after adding a new KPI.
- Clicking multiple times on **case selection** and **case search** might generate many requests and led to bad user interface performance.
- The RDI Update statement generated when updating a case memo or the CPP of a case was missing (APAR PO08810).
- In the old user interface, the case search page showed an empty table with an no results message when the search returns no results. The new user interface is changed for this.
- Adding a { to the expression text field of a Formula led to rendering problems in the user interface.
- For FCD messages, the response header contained 128 extra null bytes, which have been removed.
- After changing decimals of a numeric attribute in a challenger, Simulation and Model/Test potentially produced wrong computations because it calculated with the old number of decimals.
- Storage type field is now read only when there are no privileges to edit it.
- When a merging recomputed a target, but a previous merging or masterdata had already marked the merging source record for being stored, following issues happened: On the primary instance, the primary URID of the merging source record was empty. The merging source was recomputed instead of the target. Potentially wrong values were written to output attributes of the source record. In case a merging recomputes a target, the merging source will never be stored now (APAR PO07896).
- Validation prohibited saving a condition or a formula with the seconds denominator s. For example, ({Timestamp}+2s) (APAR PO08851).
- In the user interface, the dropdown options in pop-up must no longer be masked by the model.
- Added revision status bar to model component pages.
- The CPP highlights did not show in query results.
- Read-only tags (ex. condition value) are styled similarly to other read-only fields.
- Unavailable sorting for rule optimization statistics tables.
- Changed the new user interface copy rules behaviour to be similar to the old user interface - copy to another revision instead of other ruleset.
- On the new user interface, when there were too many data points on a bar charts x-axis, loading the bar chart component was slow and caused the page to be unresponsive.
- Encryption keys form now displays the activation comments when the key is already activated.

- Encryption keys tables now refresh according to the refresh setting in system configuration.
- If multiple elements were removed from a table and if one of them might not be deleted, all elements stayed in the table.
- Read-only multiselect fields appear as tags (with an optional pop-up that shows all items).
- Internal Windows experience is improved on lower resolution screens, with boundary checks and auto resizing if too large.
- The model revision table refreshes automatically, based on the refresh interval setting. When a golive is updating the status of model revisions, their status is displayed as Revision changes.
- Fixed issue where toolbar buttons for noneditable tables weren't clickable in Firefox (for example, help button and execute report button).
- Mandators that cannot be edited are shown as disabled in the mandator tree.
- Sequences section in the index configuration page now has a help section.
- The mandator tree in the Administration tab now shows conditions beside each mandator.
- Revision overview page now correctly disables the save button if there is no privilege to edit the revision.
- While performing a copy of an element, clicking the same element that was copied now works as expected.
- During the copy of an element, if the user wants to copy a second element that the information is correctly reflected.
- When a transaction was manually marked as fraud, the timestamp attribute was not adjusted if that attribute was defined in a submandator (APAR PO08738).
- Added help for the calendar computation section in Index based evaluation.
- The job messages dropdown in the new user interface also shows the message MTID.
- Conditions suggestions while using Python functions correctly displays parameters.
- Validation message while using Python functions in conclusions is now correct.
- During upload of a case attachment, a loading indicator is now displayed.
- Dashboard charts on the new user interface show a help button when configured to do so. Dashboard charts on the new user interface no longer show an empty tooltip if no tooltip is configured.
- After confirming single rule analysis in the new user interface, IBM Safer Payments now takes the user to the Simulation report page.
- Status Alarm Indicators show tooltips properly.
- The result tables for reports (case classes, investigation, missed cases, and investigator) show help.
- Formatting for category values was broken into tables in the new user interface.
- When switching between attributes in the user interface, the old storage type would persist.
- After starting an analysis, the mandator selection in data selection was emptied and the user had to reopen the page.
- The user interface did not allow deleting multiple analyses at the same time.
- It is now possible to view multiple case attachments at once in the new user interface. The opened view dialogs now scale in a more user-friendly way.
- In the form of a pattern definition, the occurrences-related fields were not hidden when the occurrences value was decreased from a larger value to the value 1.
- Improved the screen position of the additional text that informs the user when there are more audit trail entries that can be loaded from disk. The text is now in a more central and visible location.
- The **Check LDAP Settings** button on the System Configuration page of the New UI didn't work correctly (APAR PO09145).

Download instructions

Download IBM Safer Payments 6.3.0.00 from IBM Passport Advantage.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_3_0_00.zip

```
55b6240a8cd405179ca31cdc0b8d3f1cd9b381bb8493092b3bc884459a75fa65
```

- MD5

SaferPayments_6_3_0_00.zip

```
27ef1299a5650098b6168084ce16dfe
```

Chapter 4. 6.3.0.01 Release Notes

The Release Notes contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.3.0.01.

This release changed the version number from 6.3.0.00 to 6.3.0.01.

What's new

IBM Safer Payments 6.3.0.01 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.3.0.01 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [6.3.0.00 Update information](#)

6.3.0.01 Update information

- IBM Safer Payments is now able to detect problems about deferred writing configuration that were previously undetected. This is done by printing more log messages of E 0005. This event log message

E 0005 now also includes additional information, to which one must pay special attention after the update.

Change log

IBM Safer Payments 6.3.0.01 includes critical, major, and minor bug fixes and APARs.

Critical changes

- When using the IBM MQ interface with a response queue, IBM Safer Payments might fail while sending the response (APAR PO09469).
- An instance might fail when starting rule generation manually in the same time rule generation was running in modeling workflow. Additionally a deadlock might happen when stopping modeling workflow when rule generation was running. Rule generation is now permanently removed from modelling workflows. Rule designer is reintegrated after it had been removed in the previous fixpack (APAR PO09297, PO09295).
- Rule generation is temporary removed and no longer supported as a modeling workflow entry type.

Major changes

- The Change master key feature did not work, when cases existed. There was a deadlock preventing the master key change to progress (APAR PO09456).
- If the `noTrueChildStrategy` set in PMML boosted tree model is `returnLastPrediction` and if there is no child node that meets the criteria, IBM Safer Payments does not use the score attribute value in the parent node (APAR PO09196).
- Execution of common point query was not working.
- MCI Bypass did not work for TCP messages with binary header. IBM Safer Payments dropped the binary header before forwarding the message to a remote instance, and the remote instance might not process the message without it (APAR PO09408).
- Highlighting of a case's consolidated alarms in query results did not work correctly when more than one alarm was present. Only the current master alarm was highlighted.
- The result pages of reports did not use the full width of the page.
- The index value in a Masterdata query and Hyperlink queries were not correctly escaped leading in some occasions to empty results or potentially invalid JSON that would pop up an error message in the user interface (APAR PO09277).
- When an external query response did not contain a key for an attribute or a masterdata which is mapped in the response mapping, then the value would be overwritten by an empty value. Now the value is left unchanged (APAR PO09404).
- PMML string arrays were not correctly parsed in case the values inside the array were not enclosed in double quotes.
- The `view model structure` visualization for PMML random forest and PMML boosted trees is correctly displayed (APAR PO09320).
- A defect might cause the memory leak or fail when the user removed the MCI endpoint.
- Saving the modeling section or the revision general page caused a running rule generation on a remote instance to be stopped and might have caused wrong simulation results (APAR PO09285).
- A defect in bypass might cause the program fail.
- The time to replicate defined risk list entries that are uploaded from file has been reduced substantially on remote instances. Additionally the time to delete entries on remote instance has been reduced (APAR PO09401).
- A parse error `Unexpected Token in JSON at position` might occur when opening an investigation query that was migrated into the configuration from another instance with enabled encryption and different encryption keys (APAR PO09027).

- An instance might have failed when starting simulation while a PMML model was being uploaded (APAR PO09281).
- In rare cases, when many investigation cases were added or archived, there might be an issue for working queues that worked on the same cases.
- The system might have failed when deleting a challenger in which rule generation was running.
- It was possible to change the label of an encoded input category while it was being referenced in a PMML model or external model component. This led to unrecoverable errors during golive. To recover a re-golive on the retired revision was necessary.
- Improved how MCI threads in various status are monitored and displayed on the user interface. Defined a new KPI that allows the user to monitor MCI threads in given state (idle, reading, waiting for processing coordinator and writing response) per MCI inbound endpoint. Additionally, defined a user configurable network idle connection timeout on the inbound endpoint that allow the user to define the time after which inactive connections must be closed. Included more information in the logs when an MCI connection fails.
- It was not possible to save external model components that included conditions (APAR PO09472).
- The case audit trail now contains a button in each comment cell allowing the user to open the comment in a popup in which the text is displayed formatted as originally entered including line breaks. Related case action histories, which already offered this button before, showed some unexpected behavior when using it: Instead of opening the popup the user would be navigated to a different case if the clicked row happened to belong to a different case.
- Corrupted FLI message when the MCI message size is larger than 10000 characters and external model component is active (APAR PO09350).
- When adding a new defined risk list entry from a query, the default life time is now correctly setup. Also, risk list entries are enabled by default during creation (APAR PO09362).
- The user form in the new user interface would show the settings for masking values even when the encryption on the instance was disabled (APAR PO09323).
- The internal calculation of available/used memory on the RHEL system have been improved by fixing 32-bit integer overflow problem and taking into account MemAvailable or SReclaimable field values from /proc/meminfo to provide more accurate results (APAR PO09166, PO07255).
- If checksum check was enabled and transaction data contained a double quote followed by a closing curly bracket, the FLI might get stuck (APAR PO09335).
- Clicking on a row in the case histories and aggregated audit trail tables changed the URL of the page but did not load the case that belonged to that URL.
- The MCI was temporarily deactivated during cluster page save when it was not necessary (APAR PO09361).
- It was not possible to add a new MCI endpoint with SSL set up to read certificate passphrases through the console. The application would not ask for a passphrase and fail to open the new endpoint. Only during startup might certificate passphrases be entered.
- There was a potential deadlock while computing index and updating KPI that might block incoming computation and block the instance from shutdown.
- MCI doesn't accept new connections after disabling SSL.
- During deferred writing it was not checked correctly whether the chunk about to be written was within the safety margin of the MDC. Potentially records outside of the MDC were written to DDC.
- IBM Safer Payments might fail during shutdown routine, potentially leaving sockets open without proper close. This didn't result in any data loss as all DDC files were already written after 163 Shutdown completed successfully was printed in the log.
- When working with case attachment, any simultaneous action on it, like changing and viewing it at the same time, might result in a blocking instance that needed to be restarted.

Minor changes

- Add exception handling while adding the same condition to the rule (APAR PO09187).
- When trying to delete a simulation query by using the form button the browser would navigate to the revision selection page and show a deletion confirmation popup to the user. Clicking **Confirm** then resulted in a Cannot find model revision error message. The query was not deleted.
- The simulation report would show an incorrect message when the selected instance for a simulation was not enabled for simulation (APAR PO09138).
- Download of files that contain non-ASCII characters on the filename are now correctly named (APAR PO09346).
- The libxml library printed additional unwanted error messages to the stderr stream when parsing errors occurred.
- On Administration>System>Configuration>Interfaces>Application Programming Interface the meaning of the option **Use default HTTP headers** was backwards. To actually use the default HTTP headers, the setting had to be disabled. It was also not possible to enter multiple HTTP headers as the form only supported a single-line text input.
- The online help was updated to note that the ephemeral port range must not be used for the interface ports of the IBM Safer Payments instances (APAR PO09134).
- Kafka failover was not triggered when removing instance from cluster.

Download instructions

Download IBM Safer Payments 6.3.0.01 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
IBM Safer Payments 6.3.0.01 download link	30 Jul 2021	English	162.7 MB

For information about using Fix Central, see [Fix Central help](#).

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_3_0_01.zip

```
b260549d139e488abf6894d0c1366855e6f69a2bf84e232f12c75540f6932fe9
```

- MD5

SaferPayments_6_3_0_01.zip

```
f6fa381f5fa935d1803b62dd326d7355
```

Chapter 5. 6.3.0.02 Release Notes

The Release Notes contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.3.0.02.

This release changed the version number from 6.3.0.01 to 6.3.0.02.

What's new

IBM Safer Payments 6.3.0.02 includes enhancements.

Release highlights

- None

Enhancements

- The words *blacklist*, *black list*, *whitelist*, and *white list* were replaced with the words *blocklist*, *block list*, *allowlist*, and *allow list* in the user interface (APAR PO09400).
- The memory allocation for Compliance lists can now be changed. The parameters for the initial memory allocation as well as the memory increase can now be set in system configuration.
- On all pages where a date selector is shown a hint is shown now which time zone the date and time is in.
- New log messages were added to mark the FLI buffer roll-over.

Update information

IBM Safer Payments 6.3.0.02 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [6.3.0.00 Update information](#)

- [6.3.0.01 Update information](#)

6.3.0.02 Update information

- We are no longer supporting Python 2.6 version. If you were using this version make sure to first upgrade the Python version on your system to a version that is supported by IBM Safer Payments . Python 2.7 will still work as before.

Change log

IBM Safer Payments 6.3.0.02 includes major and minor bug fixes and APARs.

Critical changes

- None

Major changes

- Remote instances might crash when running a curtail masterdata job (APAR PO09584).
- An instance might be invalidated after restart when a revision was created, then the instance was shutdown, the API instance was changed and a golive was triggered on the new API instance.
- When changing pages in the user interface there was a chance that the user gets an Unexpected Error page (APAR PO09240).
- The maintenance function skip current FLI messages was displayed in the maintenance dropdown even when user privilege Reset FLI was missing, causing a popup privilege error when executing the maintenance function.
- An instance might crash in rare cases if the operating system was able to open a file but might not close the file properly for some reason (APAR PO09547).
- Earlier log message number zero was used to log allocation / deallocation of an attribute's simulation MDC. To keep this simulation logging enabled all the time, a dedicated log message number 826 was added since log message number zero is for development purposes.
- Deactivating the MCI when Bypass was enabled might cause a crash (APAR PO09553).
- Switched OpenSSL 1.1.1.k to OpenSSL 1.1.1.l as countermeasure against CVE-2021-3711 and CVE-2021-3712.
- The performance on the user interface has been improved when performing changes in the forms for configurations with many mandators.
- The setOffline request did not close files obtained by the application before this fix, which might have caused problems during backup of an instance after using the setOffline request. Now after the setOffline API request execution, all files obtained by the application instance except the backtrace file will be closed. The request setOffline will re-obtain files.
- The End of day job performance was improved during index purging for configurations with many mandators (APAR PO09426).
- Any string containing +/()[]{} in a rule condition would throw a validation error. These characters are now supported when the attribute being set is of type Text (APAR PO09580).
- When an attribute was displayed in a query result, and its data was not available, and it had categories enabled, the columns would be shifted on the user interface (APAR PO09568).
- The application might have crashed shortly after manual case creation or creating cases from a query (APAR PO09515).
- Added a checkbox named **Include byte order mark in CSV exports** to the user account page. If this checkbox is enabled, byte order mark (BOM) is included in CSV files that are exported using the user interface. The setting does not affect CSV files that are exported using jobs. By default, byte order mark

is not included in CSV exports. For new user accounts, its default can be configured using the setting **Include byte order mark in CSV exports for new user accounts** on the settings page.

- When a user clicked **Work case** it might happen that an already closed case (belonging to a working queue that was configured to contain closed cases) was loaded as the next case to work on. Now, clicking **Work case** always returns an open case (APAR PO09493).
- An investigator was able to execute case transitions while not belonging to the transition's user group. Also, the assignment of closed investigation cases to working queues was not done properly and as a result of that in some scenarios it was not possible to reopen a case (APAR PO09509, PO09514).
- It was possible to do certain changes, for example copying/deleting elements via context menu, on a revision that was waiting to perform a golive, for example, if interlock was enabled and the instance had to wait for the required number of instances to be available. In that case, a remote golive might have failed, causing the remote instance to shut down and become invalidated (APAR PO09477).
- When saving the settings page it would always say that the watchdog and persistent connections thread pool values had changed even though there was no change to these settings.
- When a cluster update happened on an instance while it was shutting down a crash might occur. It might for example happen during a restore on the restore recipient instance (APAR PO09480).
- Starting a simulation while saving a revision element might cause a crash (APAR PO09483).
- Query results might contain invalid JSON, if the query did not include the DDC and the CSV export options for nil values were set to empty value and the query returned data that was only available in DDC but not MDC. Under these circumstances the query result would not load and produce an error on the user interface (APAR PO09452).
- The retention administration page might only be fully utilized by users that had the role privilege to either view the model tab on all mandators or to view the mandator administration for all mandators. Additionally the user also needed the global privilege to view the system configuration. Now only the global privilege for retention administration is needed. Note though, that this privilege still allows a user to view the hierarchy of mandators on the retention page.
- The retention settings page on the administration tab was hard to use because too much content was visible at the same time. The layout of the page was changed and individual parts split up into sub-pages that can be viewed one at a time without the others being visible on screen. To make the form more intuitive the behavior of the **reset** button was changed. When performing this action the pending settings are overwritten by the active settings and a corresponding audit trail entry is produced. Apart from this, the remaining workflow and API requests have not been changed.
- When having more than one instance in the cluster, filtering the status alarm indicators in the dashboard would cause some SAIs to be duplicated (APAR PO09440).
- The detail view of a defined risk list entry did not initialize the **Expires at** field properly when being opened from the **Risk list hits** widget on the case investigation screen.
- When starting a rule report without context, a complete simulation would be started instead of just simulating the elements relevant for the simulation of this particular rule like it was in the old user interface.
- The tables in the user interface now have borders around each cell to make reading densely packed tables easier.
- Tabs (for example in cluster settings or latency report page) did not show up below each other in case they overflowed the screen and might not be seen.
- It was possible that index entries and entries in index using elements such as masterdata, events, calendars and device identifications were duplicated after running a recreate index job with deferred writing enabled (APAR PO09454).
- In the user interface, the date selector did not allow to define the time in hours, minutes, and seconds in following places: defined risk list import page for expires / starts at, case transition follow up on field, defining a timestamp reporting attribute in create CPP from a query. Additionally, the timestamp that was saved was not at 00:00:00 of the user's time zone as expected.
- Investigation cases from different Index Based Evaluation case classes that use the same index were not consolidated (APAR PO09444).

- Users using encoded categories with PMML might only encode data of type double. This behavior restricted users from using other types of data in encoded format.
- A IBM Safer Payments instance while starting up might be wrongly considered to be ready to process transaction, resulting in wrong evaluation of number of active instances in cluster for the interlock functionality (APAR PO09462).
- The privilege check for unreserveCase request was simplified to avoid unnecessary no privileges errors (APAR PO08515).
- The justification code was missing in the data sent to the server with the request of a bulk case transition, which prevented the transition from being executed in the case of a mandatory justification code (APAR PO09470).
- Safer Payments now supports all Python 3 versions starting with 3.2.
- When a PMML model component is copied, the uploaded PMML file would be copied as well. Therefore, the PMML model file won't be missing (APAR PO09379).
- When saving the same model element twice at the same time, the system might have crashed if during save an output attribute was replaced (APAR PO09446).
- Saving the simulation data selection repeatedly during a small frame of time might lead to a crash (APAR PO09449).
- On the Case Investigation screen, when case action confirmation was turned on, previewed case actions of type SMTP were triggered and sent before the confirmation was given.
- Model test (sandboxing) functionality was not working for PMML models and internally trained models.
- While an instance is offline, it was possible for its interfaces to become active when cluster update action is performed. Now interfaces of an offline instance would not be activated even after cluster update actions. Also, a new status named *Offline* is added to indicate the status of an offline instance in the cluster settings page (APAR PO09284).
- Deleting a Key Performance Indicator might rarely result in an application crash.
- A backtrace might have happened in index-based evaluations due to outdated condition references.
- A deadlock might have occurred when a modeling workflow was running in a challenger revision and at the same time the revision was deleted or taken over by a user who did not have simulation memory assigned (APAR PO09461).
- Using cluster interlock can result in golive being stuck for long time, if restore is in progress with in the cluster. This fix let's golive proceed if minimum active instances condition is satisfied (APAR PO09378).
- When simulating rules, more rules than necessary might have been simulated leading to prolonged simulation times. Rules that alter the same outputs and are computed before the simulated rules are automatically included. However, rules that are computed after the simulated rules were also simulated although not required to get valid simulation results (APAR PO09428).
- In attribute settings of the user interface, after changing storage type to not stored the attribute might only be saved if the DDC capacity had been set to 0 manually before that.
- The default storage type and xdc capacities defined in system configuration were not used when creating new attributes in counters, profiles, and device identification. Additionally when changing storage type in an attribute definition capacities might have been predefined to zero instead of the default value (APAR PO09397).
- Large redundant data was stored in the configuration file when the storage type in an attribute definition was changed and saved from the user interface (APAR PO09410).
- Performing a change on an attribute in a sub mandator while executing a golive on an upper mandator, might lead to a crash (APAR PO09495).
- Changing the data selection on a rule generation that is already running might lead to a crash (APAR PO09450).
- Simultaneous shutdown of MCI interface and an MCI connection request might result in an instance crash. Closing an MCI connection during deactivation of the MCI might be slower than before in case the sending side keeps the connection to IBM Safer Payments open until the MCI is deactivated. In a

worst case scenario the overall additional time it takes during the deactivation of the MCI might be the number of connections * 1 second (APAR PO09435).

- A defect in outgoing persistent connection might cause the user interface to become unresponsive.
- When Text or Hex values were computed with Python, which is used in Conclusion or Formula expressions, the return values leaked in memory (APAR PO09405).

Minor changes

- It was not possible to generate the French and Portuguese manual (APAR PO09577).
- The user interface was attempting to parse any response as JSON and would fail, for example, when a Proxy/CDN returns a non JSON response that gives the Unexpected token < in JSON at position 0 message, this behavior is now replaced with a more informative modal (APAR PO09504).
- A new event log ID 827 was added for errors from file closing, instead of using the event log ID 0.
- When using a shared NFS folder for DDC, the file ddc/lock.iris was not unlocked automatically when the operating system crashed and rebooted. An option called **Check for other instances** was added to system configuration to skip the lock to allow an easy restart when using a shared directory for DDC. This option is true by default to not change the current behaviour.
- The IP addresses of internal interfaces SCI, ECI, and FLI were not updated in case that domain name were used and the DNS server changed the address resolution to a new IP unless the cluster page was saved again. IP addresses are now reloaded after receiving a to be ignored IP, if the IPs have not been reloaded already during the last 10 seconds.
- On the transition to the Followup case state, the transitioning user was able to select a follow-up user belonging to a mandator higher up in the mandator hierarchy than their own. Now the user is limited to users assigned to own or descendant mandators, being in accordance with the user selection on the case selection form.
- Case investigators might see case transitions which they had no execution privilege for.
- Writing large numbers in the time field of a date picker field caused the selected date to change to a value further in the future (APAR PO09540).
- The application's built-in help did not explain how privileges to change a given type of element on one mandator affect other mandators. The change privilege on one mandator actually implies a view privilege on higher mandators to avoid creating duplicate elements. A hint was added to the online help for user accounts.
- The ability to filter the Status Alarm Indicators by instance on the dashboard was missing from the user interface.
- Position settings for Status Alarm Indicators were not reflected on the dashboard page (APAR PO09326).
- The charts of the dashboard wouldn't automatically refresh after the configured refresh interval. The values were also not reloaded after manually refreshing the page (APAR PO09319).
- On the inbound page, the label and check boxes of the Kafka instance failover priority selection appeared on different lines of the form.
- It was not possible to delete a modelling workflow, if it was used in a simulation of a challenger or a retired revision within the same mandator. It's now possible to delete workflows as long as they are not used within its own challenger or challengers of submandators (APAR PO09298).
- Normally users that can change an element on a lower mandator automatically are allowed to view this element type on higher-level mandators. This behavior was not true for index-based evaluations. The table did not include higher-level mandators if the requesting user only had the privilege on a lower-level mandator.
- Sending the confirmGolive API request with an invalid revision uid caused the API instance to create a backtrace and a unrecoverable error log message (APAR PO09386).
- The icon of the **account number of records** action available for simulation and investigation queries was changed to an uppercase sigma.

- The revision general page did not show the revision status information correctly. Also, the menu bar showed incorrect information text that the revision would be editable during golive report.
- In reports, if every value of a report result row is 0, a hint text is displayed now instead of a pie chart with invalid data (APAR PO09545).
- In the case workflow definition it was possible to set a comment for a case transition as mandatory, but not allowed, which might block the user from submitting the case transition.
- In the General Revision Settings page, a pie chart will be displayed only after a user clicks a value in the Memory Statistics table. Now the **MDC memory consumption** column is selected by default. Users can still click other columns to change the displayed chart. Additionally, a misleading text was displayed when the selected column did not contain enough data to display a pie chart.
- Sorting of numeric columns in query results that belong to output attributes would be sorted alphabetically instead of numerically (APAR PO09488).
- The persistent connection occ is cluster-dependent. Its configuration of connection pool priorities was not adapted to the cluster change.
- For model revision elements, the **New element** button is active for inherited elements, even though that is not possible.
- The **Logout** and **My account** menu options were separated into their own icons based on customer feedback.
- The version information was removed from getUserProfile API request. There was no further impact for the user interface or server.
- There were some typographical errors in the online help and the user interface that have been corrected (APAR PO09441).
- In the user interface, shortcut Ctrl+S didn't save changes that are done to date fields when the field was still focused.
- The limitation on reports pages to only allow filtering for time ranges in the past was removed. Additional validation was added for the time ranges.
- When adding a new common point query it was not enabled by default in the user interface.
- It was not possible to filter for defined risk list entries that were last edited by deleted users. Entries from all users will now be displayed when no user is selected in the filter (APAR PO08657).
- In attribute definition and in default xdc capacities setting in system configuration in the user interface, it was not validated that the MDC is smaller or equal to DDC capacity. However, this was validated on server. Additional validation behavior was improved in attribute and index sequence settings.
- Adjusted the displayed values in the query results when the attributes were not present in DDC and **include DDC** is disabled in the query, and when data is not available (APAR PO09132).

Download instructions

Download IBM Safer Payments 6.3.0.02 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release date	Language	Size
IBM Safer Payments 6.3.0.02 download link	28 Oct 2021	English	162.779 MB

For information about using Fix Central, see [Fix Central help](#).

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_3_0_02.zip

```
6eb8964c5b6e70748c471e0f1791a65d9b284f2f9f065e1f501415a357577517
```

- MD5

SaferPayments_6_3_0_02.zip

```
2b51081b4d76700e1a7597cda39d32b9
```

Chapter 6. 6.3.0.03 Release Notes

The Release Notes contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.3.0.03.

This release changed the version number from 6.3.0.02 to 6.3.0.03.

What's new

IBM Safer Payments 6.3.0.03 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.3.0.03 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [6.3.0.00 Update information](#)
- [6.3.0.01 Update information](#)
- [6.3.0.02 Update information](#)

6.3.0.03 Update information

- SQL notifications previously only worked by manually adding single quotes around attribute placeholders in the message template. This is not required anymore and result in errors now. If you are using SQL notifications in the past, ensure to update them.

Change log

IBM Safer Payments 6.3.0.03 includes major and minor bug fixes and APARs.

Critical changes

- None

Major changes

- In rare situation, it was possible that IBM Safer Payments was temporarily blocked and looked like it was in a deadlock state. This mostly happened during high-traffic or high computation situations (APAR PO09661).
- A deadlock might occur during golive if the Status Alarm Indicator or Key Performance Indicator of type retention usage was computed in parallel (APAR PO09455).
- Fixed a fail that might happen to an instance in rare cases where the outgoing FLI would timeout (APAR PO09610).
- Instances might rarely fail during golive when sending a message without message ID and having bypass that is enabled (APAR PO09576).
- In rare cases, a model element might have been saved while simulation was running on a remote instance, which caused a fail on the remote instance (APAR PO09552).
- The retention settings page on the administration tab overestimated the memory and disk space that is needed to perform resizes. The computation assumed that both the old and new requirements need to be satisfied at the same time to perform the resize. It meant that if resource usage was high already, further changes to the retention settings were not possible even if those changes would have overall-reduced memory and disk consumption. The calculation is changed now to be more conservative. During a resize only the larger of the two requirements (old or new) is required as well as an additional temporary buffer only needed during the resizing process itself. The additional buffer is required for both memory and disk space but is always only as large as the data cache of the largest attribute according to the new retention settings. The retention report was adjusted to give a better overview of each mandator's memory consumption, both old and new, as well as a clear explanation of any errors that happened.
- Case actions applied dashed pan formatting to every masked value of an encrypted numeric attribute even if that attribute did not specify dashed pan formatting in its settings.
- Case action previews showed masked values to an investigator even if that investigator was not allowed to view any values of encrypted attributes at all. It happened only if the outgoing channel configuration enabled masking of attribute values as that setting took precedence over the masking privilege of the user account. The new behavior completely ignores the outgoing channel configuration's setting within case action previews.
- For systems with many mandatory, the query performance and simulation performance were improved in case all mandators are selected or in case only a few are selected that only contain a small subset of the overall transactions (APAR PO09639).
- An instance might have failed when starting a simulation while saving a model element.
- The application might fail when running the logical golive.
- Attempting to create an external model would fail as the program would claim that there was an error that might not be seen or corrected.

- In user-interface many numeric data fields did not allow numbers larger than 2,147,483,647 (APAR PO09640).
- When using remote simulation then after saving rule generation settings the simulation was stopped and needed to be started again in order to allow running rule generation. Additionally changes from saving only showed up after saving a second time.
- Rule generation's **intercepted by existing ruleset** row would count every rule hit (APAR PO09443).
- When a message in HTTP format was followed by messages without an HTTP header on the same MCI thread, the subsequent messages were either not computed correctly or not stored (APAR PO09522).
- A fail might happen when the user disabled MCI while bypass was running or when MCI was already disabled before bypass kicked in (APAR PO09641).
- The order of computation in simulation was different than the real-time computation. In simulation, profilings were not computed mandator wise but type wise, that is, instead of iterating through all profilings of the head mandator first, then moving to the next lower mandator, and so on, it would simulate the calendars of all mandators, then the patterns of all mandators and so on. As a result, if there were dependencies across different mandators, the simulation result would differ from the production result (APAR PO09104).
- Attribute can be removed although it is still used by a submandator revision that is waiting for golive confirmation (APAR PO09620).
- When performing a head mandator golive in between simulations of a sub mandator including output or overwritable input attributes of the head mandator, the application might fail or incorrect simulation results might be produced (APAR PO09611).
- The incrementing of closed cases and not closed cases in investigation reports was incorrect. Cases closed as Genuine would increment the Fraudulent field. The Unknown field also used to increment incorrectly. In addition, the user-defined cases and Created cases were reading their values from the wrong variables (APAR PO09215).
- Safer Payments in rare occasions might have miscalculated whether the FLI buffer was full and needs a rollover.
- When updating masterdata manually or from rule actions, the change would be written synchronously to disk when deferred writing was enabled causing additional disk access (APAR PO09607).
- An instance might failed when running multiple simulation reports in parallel, which can happen via rule reports (APAR PO09383).
- A deadlock might have happened when deleting a mandator while running a query (APAR PO09331).
- A user without cpp privileges was receiving an error when trying to create a case from an executed query (APAR PO09621).
- In earlier versions, masterdata conditions in case selection page would incorrectly evaluate not based operators like not equal to, not starts with etc. It has been fixed and now masterdata conditions in case selection page would return correct results for not based operators (APAR PO09340).
- The user interface pages case selection, case search, my working queues, defined risk list, and working queues might have performed slow when many mandators and users were defined in the system.
- Previously when trying to delete an attribute that no check was performed if the attribute was used in an export job. Now such a check is performed (APAR PO09300).
- Running a simulation with low available memory would show an incorrect error message suggesting that simulation wasn't available rather than one indicating that there was insufficient memory (APAR PO09613).
- The **Private client key password file** label in Bypass settings was duplicated, the first field must be labeled **Certificate private key file** (APAR PO09537).

Minor changes

- Case search showed that cases closed or investigated by users that were associated to top mandators of the mandator that is associated to the local user.

- When multi value masterdata was started with limits, the limited value might be persisted on disk, if a revision write operation was triggered; for example, when copying a revision or performing a golive. Multi value masterdata also uses the *limit_index* parameter, which might result in unexpected capacity values. A dedicated start-up parameter *limit_multi_value_masterdata* was introduced to limit the capacity to the wanted value (APAR PO09673).
- In case multi value masterdata is corrupted, for example, due to a previous fail and infinite loops exist in their internal structure, the instance might become stuck.
- When trying to select multiple rules and enable or disable them, an error would occur if any of the rules had a condition regarding an encrypted attribute.
- Archiving audit files when they are already archived overwrites the archived .latest case file.
- SQL notifications might not be executed due to the attribute placeholders being replaced with the attribute's value. A potential workaround was to include single quotes in the message template to surround each attribute value. In this version, the behavior was changed to not require single quotation marks in the message template to be consistent with SQL case actions.
- Before the fix unavailable PMML models were parsed during Sandbox testing. Now only enabled PMML models are parsed by Safer Payments during Sandbox Testing. The fix also disables Sandbox compute button while Sandbox testing is still running.
- Users might previously interact with certain pages under the Model tab without the associated privilege to edit a page. Interactive components within model pages are now set to read-only mode and cannot be interacted with if the user doesn't have the required edit privilege.
- Lists must always have at least one output value and condition, but on the new UI it was possible to delete the last value or condition and still save.
- Users who did not have the Modeling... privilege on their role were still able to see the **Modeling** pages within a revision.
- The numbers in the FLI status Reconnecting were shown incorrectly, and the numbers in the FLI status were displayed as floats instead of integers.
- Added help text for two settings, **Use IP address for session binding** (EnableIPSessionCheck) and **Use HTTP header X-Forwarded-For for session binding** (EnableXForwardedForCheck), in Authentication Settings within the Administration tab (APAR PO09508).

Download instructions

Download IBM Safer Payments 6.3.0.03 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release date	Language	Size
IBM Safer Payments 6.3.0.03 download link	21 Jan 2022	English	158.8 MB

For information about using Fix Central, see [Fix Central help](#).

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_3_0_03.zip

8aac0f0c1fe94eb9412b805548620ac986e0254ded773fd072bb92c3148e11e2

- MD5

SaferPayments_6_3_0_03.zip

32834ef93137f3208c58c96177cad939

Chapter 7. 6.3.1.00 Release Notes

The Release Notes contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.3.1.00.

This release changed the version number from 6.3.0.03 to 6.3.1.00.

What's new

IBM Safer Payments 6.3.1.00 includes enhancements.

Release highlights

- None

Enhancements

- Improved the performance for specific counters. Specific unnecessary computations were optimized for counters that don't calculate amount computations.

Update information

IBM Safer Payments 6.3.1.00 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [6.3.0.00 Update information](#)
- [6.3.0.01 Update information](#)
- [6.3.0.02 Update information](#)
- [6.3.0.03 Update information](#)

6.3.1.00 Update information

- A warning was added when running encrypted import file jobs without AES-CTR, as the previously used AES-CBC had known security issues. It is recommended to switch encrypted import jobs to AES-CTR.
- The remote wait factor was considered redundant with the introduction of interlock. It is recommended to use interlock because it ensures that re-create index jobs are not executed in parallel on multiple instances.
- To use external models, it is required to have the meta attribute `primary urid` and `urid computation complete` as well as the fraud mark index.
- The following API requests now enforce to use a POST request. Any potential scripts that use these requests must also use POST: `Login`, `ChangeAuthAddress`, `InsertPin`, `ChangePassword`, `CreateDefinedRiskListImportSettings`, `GetCaseAction`, `IsPasswordValid`, `PathExists`, `Save`, `SendCaseActionFromPreview`, `SetMasterdata`, `SetQuickSearchCasesTablePreference`, `SetUserExportPassword`.
- To avoid remote code execution in spreadsheet applications, CSV exports are now prepended by a single quote when text values start with `=`, `+`, `-`, `@`, `,`, `tab`, or `return`. You can still switch to the old behavior by disabling **sanitize CSV exports** in **Administration > System Configuration > Misc**.
- Since version 6.0.0.10 Safer Payments has created a backtrace file every time, it starts (called `backtraces_starting_at_[InstanceID]_[YYYY-MM-DD].iris`). This file was previously empty until a crash occurred. The file now has a line stating the version.

If you have automated file management processes that move older log files to a separate directory, then you must ensure that the backtrace files are not moved along with the logs. All backtrace files must stay in the logs directory, and if any of them contain more than a single line then they must be shared with IBM support.

- If the option to **Resolve uncached reporting attributes** is enabled, it will no longer show values for reporting attributes in the cases table that are not selected in the case class of the respective case. If you want to see additional reporting attributes, enable the respective attributes in the case class. For existing cases, the values for the additional reporting attributes will be loaded from transactional data.

If you are experiencing slow loading times for the cases table, it is recommended that you disable the **Resolve uncached reporting attributes** and **Include DDC to resolve uncached reporting attributes** options, if they are not necessary for your use case. For more information, see the online help for more information.

- After a crash occurs, an instance is now automatically invalidated. Use an additional cli parameter `after_crash=start` to continue previous behavior.
- In case you use channel names with 20 characters, reduce the name to 19 characters to prevent MQ from connection issues for this channel.

Change log

IBM Safer Payments 6.3.1.00 includes critical, major, and minor bug fixes and APARs.

Critical changes

- The attach button in case investigation was always deactivated. The drop and drag functionality was not working.

Major changes

- The following elements allowed a user without the privilege to view unmasked data to create conditions to enumerate encrypted data: simulation data selection and target conditions, rule generation training and verification data selection and rule generation predefined conditions, random forest training and verification data selection, reporting query performance indicator, defined risk list entries, and defined risk list upload alert lists.

- In certain situations, cases with masterdata on category attributes might not be displayed in case investigation (APAR PO09780).
- A backtrace or crash might occur after a golive if the data from the champion to retire was accessed from a query, case investigation, and so on (APAR PO09619).
- Improved restoration times on the Receiving side by optimizing the parsing functionality.
- The application crashed when trying to save a model that is generated by the random forest generator after it was stopped manually (APAR PO09721).
- Empty double quotes appeared in the response object if more than 10 rules were mapped from a client response. The fix introduces a sorting function to handle those scenarios (APAR PO09690).
- In rare situations, a crash might occur when conducting multiple save operations on a case. It can happen when a CPP or memo is saved multiple times for the same case during a short time frame, for example, by double-clicking the save button (APAR PO09701).
- An option was added to load encrypted file jobs that use AES-CTR as cipher. The online help was updated to use this algorithm.
- In rare situations, the FLI connection hangs (APAR PO09686).
- The remote golive factor has been removed from the re-create index job form (APAR PO09682).
- Saving attributes with computation impact did not invalidate an active simulation, causing possible access to invalid data. Additionally when saving revision elements a warning popup will be shown when there is an active simulation (APAR PO09525).
- Maximum latency, FLI rate, and latency violations SAIs did not work correctly because the option for instance selection was missing from the user interface (APAR PO09751).
- Computation results were inconsistent between instances when using external models with mergings recomputation (APAR PO09743).
- In rare cases where a deadlock prevented a simulation from being stopped, it would prevent the API being disabled, which might result in two instances having an API enabled. This change prioritizes deactivation to prevent that scenario (APAR PO09481).
- Running a curtailing masterdata job might have caused a deadlock when index entries were update at the same time in parallel (APAR PO09664).
- The login request and other PADSS sensitive API requests were not rejected by the server when sent as GET instead of POST request. The requests that now enforce POST are: Login, ChangeAuthAddress, InsertPin, ChangePassword, CreateDefinedRiskListImportSettings, GetCaseAction, IsPasswordValid, PathExists, Save, SendCaseActionFromPreview, SetMasterdata, SetQuickSearchCasesTablePreference, SetUserExportPassword.
- Random forest generation within IBM Safer Payments ignored the conditions that are configured during data selection. This caused inconsistency in the number of records being processed during a simulation and random forest generation (APAR PO09646).
- In attribute settings, the table had incorrect data types.
- Compliance lists did not hit a record when the list used the metaphone setting and a search was done for more than one name (APAR PO09643).
- The missed cases report included cases whose generation time was within the selected time range, although the reference parameter is set to case closed time.
- During re-create index job the MCI, MQI, and KQI interfaces were not closed when bypass was activated or when close during golive option was activated. This might have caused redundant deferred writing.
- In rare situations, a crash occurred if an analysis was deleted while being accessed by another part of the code. This change introduces protection to prevent a crash from occurring in that scenario (APAR PO09724).
- The table on the report page can sometimes show an extra column of data, misaligning the regular columns with their headers, and causing some columns not to be displayed.

- Generating a reporting query by a job resulted in a report that did not contain any headers for the columns. Now, the correct headers are included. In addition, CSV files that are exported from reporting queries and group by queries had the header for the grouping attribute as `Grouping attribute value`, this also has been changed to reflect the actual name of the attribute. For both reporting queries, and group by query reports when they are used for rule performance, the header of the first column was changed from **rule performance** to **rule**.
- The icon and text of the simulation progress component did not indicate that the simulation had started and was undergoing initialization. Now, a distinct icon and text line makes that transition is more apparent (APAR PO09601).
- CSV exports generated by IBM Safer Payments might trigger remote code execution when opened with an external stylesheet application that was vulnerable for remote code execution.
- To facilitate issue investigation, added a release string to the backtrace file (`backtraces_starting_at_[InstanceID]_[YYYY-MM-DD].iris`).
- The options to enable/disable **Resolve uncached reporting attributes** and **Include DDC to resolve uncached reporting attributes** were not available on the user interface. Added them to Administration > Configuration > Case Investigation. The default is false for new configurations.

In addition, the cases table no longer show values for reporting attributes that are not selected in the case class of the respective case, as this might cause negative performance impact (APAR PO09399).

- The default timestamp for notices was previously set to a date far in the past. Now it is set to the current date and time (APAR PO09675).
- Users with mask level must not see values can still see constant values in clear text in the expression fields of conditions that use encrypted attributes.
- Salts for export jobs have been generated with a weak random number generator on client side, when not modified by user. Additionally, when not refreshing the browser, newly created export jobs got the same salt value.
- The latency report shows redundant computation element unknown and prints 0 instead of External Model.
- On encrypted instances, a popup error might have appeared when opening a case creation page.
- Multiple buffers overflows have been fixed:
 - Configuring the MCI incoming buffer smaller than an incoming message causes the message to be written into invalid memory regions.
 - Configuring the MCI response buffer to be smaller than 80 leads to the application writing parts of the response into invalid memory regions.
 - Configuring the FLI buffer to be less than 80 Bytes lead to a buffer overflow whenever a configuration update or transaction message is synchronized.
 - Triggering a case action from the **Potential first parties** section of a collusion case causes a null terminator to be written into invalid memory when the case action message placeholder `[Firstparty]` is used and the value for the first party has the maximum length of the first party attribute.
 - Configuring the IBM MQ interface to use more than 256 characters for most fields causes a buffer overflow inside the IBM MQ library.
 - The value for MQ Channel is not 0 terminated, possibly leading to security problems. The maximum length for the MQ Channel name is now 19 characters.

Buffer overflows in general can have severe security impact although it is hard to judge how exploitable the previously mentioned overflows really are. Buffer overflows can also cause the application to crash in rare cases.

- An instance is now automatically invalidated after a crash occurs. This was changed because a crash usually causes broken data and data loss. Added a button in cluster user interface settings to force an instance to startup. Added an optional command-line argument `after_crash` to enforce different startup behaviors.

- If a user swiped over a component with a tooltip on a read-only page, the tooltip message box remained open after the user moved the cursor away. The tooltips now disappear as expected (APAR PO09413).

Minor changes

- When restoring one instance from another, the checksum calculations for each file are slower than necessary as they are only performed by single thread.
- Updated the online help as follows: removed the manual restore steps, added further information about simulation load balancing and server time zone setting, and replaced the word *blacklisting* with *blocklisting* (APAR PO09742).
- Updated the online help: improved the description of **Model Factory's Relax All Up Threshold**.
- Number of selected items is not shown in query result table (APAR PO09738).
- The UID assignment code for some elements was slightly refactored to remove the possibility that some elements might claim more UIDs than necessary (APAR PO09025).
- Code around the usage of conditions, internal model, random forest and lists computation was streamlined without a change to functionality.
- Sandbox records and modeling workflows might be deleted without the required privileges. Also, it didn't require the proper privilege to create modeling workflows.
- Users would occasionally be presented with an incomprehensible error message when attempting to encrypt an attribute. This would occur when a rule conclusion existed that would overwrite or change the attribute in some way. The error message now provides easily readable information about which rule conclusion is blocking the change to encryption status.

Download instructions

Download IBM Safer Payments 6.3.1.00 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release date	Language	Size
IBM Safer Payments 6.3.1.00 download link	13 Apr 2022	English	158.8 MB

For information about using Fix Central, see [Fix Central help](#).

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_3_1_00.zip

```
f7e75bfd38924bce8d7f7e59f561987840e4198ff65fe89f36e85d8cb8a979b1
```

- MD5

SaferPayments_6_3_1_00.zip

```
687833c022983eb4a558fcb8dd8e7947
```

Chapter 8. 6.3.1.01 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.3.1.01.

This release changed the version number from 6.3.1.00 to 6.3.1.01. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.3.1.01 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.3.1.01 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [6.3.0.00 Update information](#)
- [6.3.0.01 Update information](#)
- [6.3.0.02 Update information](#)
- [6.3.0.03 Update information](#)
- [6.3.1.00 Update information](#)

6.3.1.01 Update information

- To use external models, it is required to have the Primary URID, Primary instance ID, and URID computation complete meta attributes and the fraud mark index.
- Review the definition of remote look up indexes. Ideally, the remote lookup index should provide a value for every transaction. Otherwise, it is possible to see occasional empty values for reporting attributes in case investigation (cases table, case history, case actions, external queries, CPPs) when values are not stored in the case data but need to be read from the transactional data of the case alarm. This does not affect embedded investigation queries.
- The option of record purged entries is automatically enabled if the purged outdated entries is enabled.
- The attribute system time of the server response of a message of type JSON now uses the same date format as messages of type XML. This means that the format changed from yyyy-m-d to yyyy-mm-dd, so days and months with a single digit now contain a preceding 0.
- In past versions, unnecessary attributes were simulated, resulting in additional memory requirements because rules and final rules were automatically added to the simulation if they change the same conclusion attribute as a rule selected for analysis. Now, only selected rules are simulated. If all rules affecting a certain attribute are required (the previous behaviour), make sure to explicitly enable this attribute for simulation in Model>Modelling>Attribute settings.

Change log

IBM Safer Payments 6.3.1.01 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defects were fixed:

- Safer Payments hangs and some operations never finish. Certain operations, for example, disabling or changing FLI, SCI, or MCI, are more likely to cause the problem even though they themselves might not hang (APAR PO09870).
- Retrieving data for reporting attributes from transactional data during case investigation takes too long if the remote lookup index cannot be used to find the unique record IDs (URIDs). Now, the search is omitted and it is assumed that the remote lookup index provides a URID for each case. As a consequence, it is possible to see occasional empty values for some attributes if a case (alarm) does not have a value for the remote lookup index (APAR PO09813).
- Broken multivalue masterdata is erroneously detected during data deletion that involves relationship attributes (APAR PO09809).

Major defects and changes

The following major defects were fixed and major changes were made:

- Computation results of counter and precedent on remote instance are missing when external models exist.
- Data is inconsistent due to the omission of the primary instance ID in external model synchronization.
- Data is inconsistent due to a defect in the index search for external model synchronization.
- A crash occurs if a defined risk list is concurrently queried and modified (APAR PO09854).
- In the user interface, it is not possible to set multiple emails as to address in notifications (APAR PO09398).
- Now, simulation automatically detects rule condition attributes that need DDC access and informs the user in the report (APAR PO09839).
- Deferred writing is needlessly interrupted when mandators, messages, working queues, key performance indicators, status alarm indicators, charts, case classes, case close codes, case workflows, case states, case user groups, notifications, external queries, or reminders are saved (APAR PO09594).

- Added a button to the System Internals general page to export the page to a zip file.
- Fraud mark report column references are sometimes created from challengers and invalidated revisions instead of from champions (APAR PO09846).
- The preview for case investigation attachments does not display images (APAR PO09114).
- A crash might occur when analysis is stopped multiple times (APAR PO09723).
- The user interface unnecessarily displays `is true / false` in the expression field for conclusion operators (APAR PO09630).
- When a malformed transaction message is received, the system issues a misleading log message that FCD data stream is faulty even though the message type is not FCD (APAR PO08856).
- Broken multivalue masterdata is erroneously detected during data deletion (APAR PO09808).
- Updated OpenSSL to 1.1.1n.
- MCI bypass connections fail with a certificate error when the target MCI endpoint validates client certificates. This problem is caused by the bypass connection not sending the configured client certificate.
- In rare situations, a backtrace or crash occurs after a golive if the data from the champion to retire is accessed from analysis, reports, simulation, query count, or some maintenance functions.
- A crash might occur during case investigation and escalation-related operations when a golive is run in parallel (APAR PO09205).
- Remote instances crash during startup after another instance prints the log message: `513 Could not initialize incoming socket for StatusControlInterface` (APAR PO09878).
- A crash might occur due to an out of memory error during computation. Now, required memory is calculated to avoid such a crash, and the peak memory usage for random forest generation is reduced (APAR PO09735).
- The timed rollover setting for calendars is not available in the user interface.
- The system information page can show a wrong number of open MCI connections if multiple MCI connections get opened or closed at the same time (APAR PO09834).
- Documentation for maintenance function `Create conclusion expression pair list` is missing in the online help (APAR PO08906).
- My account preferences **Ignore Cases in Search**, **Print view for individual elements**, **Copy view for expressions**, and **Set ignore cases as default** are not saved after being saved (APAR PO09830).
- The maintenance function `create conclusion expression pair list` does not work in the user interface (APAR PO09292).
- Scheduled jobs are potentially run twice instead of once (APAR PO09769).
- When revisions are compared, the message `changedNoImpact` is shown as a comparison result for an index even though no field is shown as changed, and the index has indeed not changed (APAR PO08218).
- Realtime interception code for the conditions field shows an invalid verdict even with the valid code (APAR PO09484).
- When revisions are compared, changes to FCD mappings display only if both start and length were modified. The change is excluded if either start or length was modified (but not both). Now, the change displays if either or both start and length are modified.
- For security reasons, fields for entering sensitive data now explicitly set autocomplete to off.
- When comparing revisions and using the audit trail, the following attributes are missing: **Retry mergings**, **Max merging attempts**, **Retry wait time**, Update calendar profiles, and events fields for **Mergings**. Even if **Enforce time** is cleared, **Tolerance days** incorrectly displays in the revision compare (APAR PO07683).
- Removed the version information of libraries from `main.js`. This change was made for security reasons.

- The constants of encrypted conditions in rule or random forest generation display as encrypted values instead of clear text.
- It is possible to create reports with an invalid data range by using a script (the from date value is larger than the to date value).
- Added the SameSite=Strict directive to the Http cookie that is set during the user login. This change was made to reduce the risk of Cross-Site-Request-Forgery (CSRF) attacks.
- An error occurs when a reporting query is run with rule performance checked.
- Now, additional information is logged to more closely investigate and monitor the simulation operation.
- When comparing revisions, an error is issued if changes to an external model were made between these two revisions (APAR PO09896).
- List element is shown as changed in revision comparison result if it has more than two output values, even though there is no change between these two revisions (APAR PO09760).
- Now, data loading when a doublet is detected is only performed on the primary instance (APAR PO09815).
- Enhanced the index performance after index size is increased. Fixed a potential buffer overflow after index size is decreased (APAR PO09578).
- Using retention by time can lead to increased computation latencies for huge configurations. Now, there is no difference in the computation flow between retention by records and retention by time. To limit the visibility of data to the configured retention periods, the end of day job removes outdated values from the data caches in a process called trimming. For more information, see the online help for Administration>System>Retention settings (APAR PO09816).
- Saving rule generation settings with a condition that uses an encrypted attribute fails. This problem leads to an invalid revision being sent using FLI, causing remote instances to remove all elements in that revision (APAR PO09805).
- In rare situations, a crash occurs when simulation data selection is saved while rule generation is running.
- When messages in JSON format are used, the server response from the message contains an inconsistent format for the attribute system time compared to when messages in XML format are used. In the JSON response, changed the format from yyyy-m-d to yyyy-mm-dd, so days and months with a single digit now contain a preceding 0 (APAR PO09279).
- In rare situations, a crash occurs when a case is exported from a cases table export while the working queue of the case is unassigned from it, for example, because a user started investigating the case (APAR PO09223).
- Extract query data functionality is missing in query result tables in the user interface. Validation for the extract query template is also missing. Now, the whole extracted data can also be copied with the Confirm button in the pop-up window (APAR PO09714).
- A crash might occur when a defined risk list entry is saved while it is being computed. This problem is due to a read access violation (APAR PO09631).
- In past versions, unnecessary attributes were simulated, resulting in additional memory requirements because rules and final rules were automatically added to the simulation if they change the same conclusion attribute as a rule selected for analysis. Now, only selected rules are simulated. If all rules that affect a certain attribute are required (the previous behavior), make sure to explicitly enable this attribute for simulation in Model>Modeling>Attribute settings.
- Now, group by queries can use all valid attributes in conditions (APAR PO09212).
- The responder URL field on the MQI configuration page is erroneously marked as required (APAR PO09727).
- **Include DDC** cannot be enabled for Counters and Precedents.
- Model elements like counters and events do not display the peer index aspect attribute when the form is opened from within a challenger (APAR PO09732).
- Creating cases manually with Boolean reporting attributes always results in a validation error.

- Modified the purging mechanism to replace outdated values with constant values that are easier to compress. This change increases the performance of the restore (APAR PO09871, PO09872).
- When data is exported, the attributes that are stored only in DDC are ignored even if the **includeDdc** checkbox is checked. Now, data for the attributes that are stored only in DDC can be exported (APAR PO09695).
- A crash might occur if successive simulation reports are not explicitly canceled by clicking the **Stop simulation** toolbar action before leaving the page. Now, simulation check report cancellation requests are automatically sent when leaving the report page, regardless of the means (APAR PO09394).
- Condition operators `same/distinct Bnet/Cnet` had no short string representation in table columns and other places. The short string representation for conclusion operator is `(if not empty)` was slightly adjusted.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- Text is missing in the Model Rules deletion dialog.
- If simulation is interrupted, a false Fatal Error code might be logged.
- Backtraces are written to multiple different files, and old empty backtraces are not deleted during startup.
- The mdc or ddc storage capacities of an attribute are incorrect in the audit trail. The values of `limit_mdc` and `limit_ddc` command-line arguments are shown (if applied) instead of the capacity that the user defined.
- The Show reference button for attributes of patterns causes an error. Removed the Show reference button for counters because counters cannot have references. Also, the Show reference button for attributes of events incorrectly shows untranslated text (APAR PO09867).
- Streamlined the code in PMML (Predictive Model Markup Language) without a change to functionality.
- If the simulation of a PMML (Predictive Model Markup Language) random forest model is stopped and simulated again, the model is not simulated, which causes empty output attributes (APAR PO09236).
- Some formulas in the online help display incorrectly, for example, formulas in Summary Statistics, Masterdata, and Calendar Profiles (APAR PO09387).
- In Model, final rulesets and rules are visible even when they are not enabled in the mandator.
- Values in the **Account** and **Period** columns incorrectly show in the reporting query results table (APAR PO09770).
- For rebuild index, added a log message that indicates progress when nilifying large sequence attributes. For reset index, improved the log message to indicate progress. The new log messages for nilifying sequence and reset index have log ID 841 and 840, respectively. Log messages for rebuild index and reset index are now also in the console log (APAR PO09789).
- Improved tooltip text for Reserved RAM in System Internal -> General Information, Enable extended authentication, Case consolidation, and Message for MQ Queue. Added more online help information for KPI type of FastLink message rate, Heartbeat, Case consolidation, and Message for MQ Queue. Added Reporting query to the online help. Updated the pop-up warning message about master key change.
- Added an option to the System configuration that allows compression to be disabled during a restore.

Download instructions

Download IBM Safer Payments 6.3.1.01 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release date	Language	Size
IBM Safer Payments 6.3.1.0.1 download link	29 Jul 2022	English	151 MB

For information about using Fix Central, see [Fix Central help](#).

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_3_1_01.zip

```
4482be82b5f99387893f42d1afa76fd7101ae7f07b1a489d3abff6ff8bdd989a
```

- MD5

SaferPayments_6_3_1_01.zip

```
04edf7eb3ed0f99eb860d8b5f9fcf484
```

Chapter 9. 6.3.1.02 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.3.1.02.

This release changed the version number from 6.3.1.01 to 6.3.1.02. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.3.1.02 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.3.1.02 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [6.3.0.00 Update information](#)
- [6.3.0.01 Update information](#)
- [6.3.0.02 Update information](#)
- [6.3.0.03 Update information](#)
- [6.3.1.00 Update information](#)

- [6.3.1.01 Update information](#)

6.3.1.02 Update information

- After the update, transactions always use only a single FLI message for synchronization. When external model components are involved, the FLI message is sent after all external model components have been processed. This increases the time until other instances in the cluster are made aware of a transaction. If aggressive fail-over mechanisms are employed for the online data interfaces and a transaction that does not compute in a given amount of time is resent to another instance in the same cluster, the same transaction might be computed on multiple instances because neither instance can properly detect the doublet. All instances will thus perform the full computation, including the execution of external model components. You must consider the additional traffic in your external system setup. In cascaded horizontal scaling environments, where external model components are used to target other Safer Payments clusters, those clusters should now enable doublet detection to avoid problems caused by the same transaction being sent in from different instances of the primary cluster. When upgrading the cluster, you must disable FLI on all instances and enable it only on instances that have been upgraded.
- Added MCI response error code 1017. It is used for MCI messages that cannot be correctly computed due to index deletion issues.
- Log message 0490 now displays more often, usually in cases where 0361 was previously printed.
- When updating a cluster or a persistent connection type outgoing channel, it takes about five seconds to process after the save button is clicked. It will be improved in a future fix pack.
- Added more and stricter error checking for JSON mappings. Now, mappings that were previously accepted might be rejected, which might prevent startup. After the upgrade is complete, look for error message E0526 in the startup logs. If you find the error message, return to your configuration backup. Fix the incorrect mappings and attempt the upgrade again.

Change log

IBM Safer Payments 6.3.1.02 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defect was fixed:

- The CPU usage of an instance can reach 100% if more realtime threads are used than the number of CPU cores (APAR PO09914).

Major defects and changes

The following major defects were fixed and major changes were made:

- When bypass is enabled and the MCI uses SSL, a crash might occur during a structural golive. The crash occurs if the golive takes a short amount of time, for example, a few milliseconds if it is the initial golive of a new mandator. It is caused when the instance is establishing the SSL handshake while the golive completes and shuts down the bypass connection (APAR PO09934).
- During the end of golive, external models get no response from external systems.
- At the beginning of golive, MCI does not respond even if bypass is enabled (APAR PO09960).
- At the end of golive, MCI does not respond even if bypass is enabled.
- Golive is blocked due to starting bypass while MCI is inactive.
- The unrecoverable error message `Attribute reference in condition not found` displays if case selection attributes are added that do not belong to the selected mandators (APAR PO09632).
- During startup, the `iris_sql_util.so` file cannot be loaded and an error message is displayed. On RHEL7, the message is `/lib64/iris_sql_util.so: undefined symbol: initImpl`. On RHEL

8, the message is `iris_sql_util.so: cannot dynamically load position-independent executable`.

- Errors about loading external fonts display in the browser debug console (APAR PO09191).
- Certain operations that require maintenance mode, for example, golives or saving a mandator, appear to hang in the user interface. Now, when a user performs an operation that requires maintenance mode (except for golives) and the instance is performing another operation in maintenance mode or cannot enter maintenance mode, the operation is canceled. The user is warned and must retry later. When a user performs a golive when maintenance mode is active, the golive is queued and the user is warned. In addition, the maintenance mode status was added to the cluster page and the revision information page. Help text was updated to better explain maintenance mode (APAR PO09570).
- An unrecoverable crash might occur if certain invalid mapping definitions are used to generate a message report or if those definitions are in use when a message is received. An example of an invalid mapping definition is a JSON element name that contains double square brackets (APAR PO09847).
- In the formulas under model components, saving the form by using the Ctrl+S keyboard shortcut while the focus is on the expression field does not save the formula expression correctly.
- Exporting a case table with masked data to CSV can result in incorrect columns. The defect happens when the user cannot see the masked values and the value is smaller than 10 characters. All the characters get replaced by X, including the separator (APAR PO09674).
- Cases and case audit files on a remote instance are stored as temporary files in an `arc` directory rather than as case files in an `inv` directory when the case is transferred over FLI. As a consequence the case cannot be worked on that instance (APAR PO09831).
- Expression elements that are generated from expressions that were pasted from Excel sheets do not remove special characters (white space, newline, and so on) from the expression. The user interface might crash if more expressions are added or if the newly generated ones are sorted manually by the user (APAR PO09445).
- If any number of rules are changed within a ruleset, revision comparison displays every rule in the ruleset as changed.
- Form fields that contain a message or body template are too small for most use cases. The user must manually resize them to be usable (APAR PO09818).
- When the option `format values` is used in an Outgoing channel configuration or case action/notification, the decimals for the amount attribute are lost (APAR PO08209).
- For some dropdowns on several pages, for example, conditions in model elements, the text that is entered to filter the dropdown options sometimes reverts to the initial option that was selected.
- When extended authentication is enabled, after a user logs in with two-factor authentication, the navigation menu is not displayed. Additionally, the initially selected tab is not the **Start on** tab that is defined in the user's profile settings (APAR PO09796).
- The attributes that are available on the left side of merging conclusions depend on the system configuration setting **Mergings may use DDC** in Administration>System>Modeling. If the setting is not enabled, attributes that are stored only in DDC are not available in merging conclusions. In fact, the system setting should affect DDC access only for merging target conditions and termination conditions.
- In rare situations, a crash occurs when simulation data selection changes to a smaller URID range and the save hangs. Then, in the same moment, the user opens and runs a simulation report in another tab (APAR PO09850).
- A crash can occur during the end of day job if an index is corrupted and the index entry is purged (APAR PO09784).
- SSL handshake blocks the system when it waits for the response from external server (APAR PO09605).
- In the user interface, improved the performance of the external model page (APAR PO09749).
- The filter at the top of the model components page does not initialize correctly. If the filter selection is changed, the results are not updated correctly.
- When output attribute values are included in doublet detection responses, the output values might have random data. Added a checkbox that is named **Access protection for outputs**. If it is selected, access

protection is applied to doublet detection. Also, **retry** in access protection of mergings was renamed to **attempt** (APAR PO09868, PO09814).

- On the Own Input Attributes page, default storage options are displayed for existing inputs and outputs rather than the saved options.
- In rule conclusion under model revision, if the attribute's data type is anything other than numeric or timestamp and a Python function without parameters is added in the expression field, an error message displays and the conclusion cannot be saved.
- A crash might occur if a broken timestamp in YYYYDDDhhmmss format, for example 202200000000, is sent (APAR PO09882).
- In rare cases, the FLI buffer gets corrupted and messages hang if the message header or the complete message exactly hit the buffer end during rollover (APAR PO09873,PO09900).
- In case investigation, actions like Followup and Close cannot be completed in Case History (APAR PO09857).
- Save and execute simulation query fails and stops simulation when simulation is running on a remote instance. Refresh simulation query result fails when simulation is running on remote (APAR PO09855).
- In case investigation, when an attachment comment in the attachments table is edited, the newly entered value is displayed in the table only after the page is reloaded.
- Improved message synchronization so that transactions use only a single FLI message. Up until now, IBM Safer Payments used two FLI messages to synchronize a single transaction when that transaction involved the execution of external model components. This method of synchronization led to data loss and data inconsistencies due to the complexity involved in merging the two messages. Notably, in the gap between the two FLI messages, profiling elements like counters produced wrong results by counting (or not counting) unfinished transaction records (transaction records for which the second FLI message was not yet handled).
- When a multiline value is present in the title or explanation field in the compliance list xml, only the first line of the text is displayed on the Compliance List Hits pop-up. The appearance of the pop-up for entry details is inconsistent across several pages (APAR PO09557).
- The results of group by queries and reporting queries show incorrectly formatted values for timestamp grouping attributes. Also, the results do not take the IBM Safer Payments time zone into account if the system time meta-attribute is used (APAR PO09894).
- If aggressive fail-over mechanisms are employed for the online data interfaces and a transaction that does not compute in a given amount of time is resent to another instance in the same cluster, multiple instances might compute the same transaction at the same time. In rare cases, both instances end up with the same transaction but with different primary instance IDs and URIDs. This leads to problems when fraud marking is performed. The likelihood of this happening is increased when external model components are used. Now, doublet detection handles these cases by correcting the primary instance and URID of the found doublet. The system always takes the smaller primary instance and the corresponding primary URID and stores them in the doublet.
- In case investigation, the query result table sometimes resets the table preferences if the page is refreshed (APAR PO09902).
- Added data to the log message for corrupted FLI buffers (APAR PO09891).
- A crash might occur if rules are enabled or disabled while an analysis is running (APAR PO09910).
- Performance issues and errors occur in the user interface because queries are not correctly cleared from memory (APAR PO09920).
- If the simulation instance is set to an instance that is not the API instance, the getRevisionStatus request is forwarded to the simulation instance. It might contain trailing zeros or more characters at the end of the response that can cause 503 errors in combination with some proxies and load balancers (APAR PO09913).
- A crash might occur during rule generation if the page is refreshed at the same moment that the **Stop rule generation without saving** button is clicked or a rule is committed (APAR PO09885).
- Mandator memory limit is calculated with revisions that are not running (APAR PO09548).

- When a case is opened, the case history table is not displayed for the selected reporting attributes. It is displayed only after the selected reported attributes are changed (APAR PO09865).
- A reporting query might access invalid memory if it runs in parallel with golive (APAR PO09901).
- In case investigation, when an attachment comment in the attachments table is edited, the attachment comment editor does not render correctly and is not visible during editing.
- Simulation MDC is created for overwritable inputs when data for that input is already available in MDC.
- Masterdata update might be lost when it is transmitted by using FLI (APAR PO09940).
- The connection to IBM MQ times out if MQ definition values, for example, the channel name or queue manager name, is longer than 19 characters (APAR PO09942).
- A crash might occur if simulation data selection is saved multiple times and the analysis that is included in the simulation is defined to use simulation data selection (APAR PO09935).
- Golive can hang if there is a simultaneous case action activity in the user interface to send case actions (APAR PO09952).
- A crash might occur when disabling MCI if bypass is applied earlier.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- The audit trail report does not include MDC and DDC retention values. Now, the fields are included (APAR PO09944).
- Improved the online help. Added information about multi-relations workflow, model revision golive, index internals, and latest latency violations. Added more details to information about batch jobs, MCI bypass, MCI XML format, and conditions. Corrected tooltip text for Show uncomputed simulation elements, CPP > Case group, Highlight CPP attributes, and Archive sent messages. Also, the error This entry must be greater than or equal to 1 is now printed if the number of records is set to 0 in query definitions.
- An unrecoverable error occurs during startup if a revision has an invalid PMML model (either the attachment is missing or it is invalid) (APAR PO09824).
- If an error occurs during the sending of a notification, log message 0361 contains an invalid path to OCCM. Now, log message 0490 is listed after log message 0361. It contains the correct OCCM path along with the case action name and case UID, if available (APAR PO08111).
- The **Show on dashboard** checkbox on the Administration tab does not toggle the display of Key Performance Indicator (KPI) tiles (APAR PO09794).
- PMML scorecards that do not end in a newline character cannot be imported. For cards that can be imported, there is no notification that an import was successful. There is no warning that all the rules of the ruleset for which the scorecard is being imported will be overwritten by those that are parsed from the scorecard (APAR PO09852).
- In the Outgoing channel configuration page, the **Show references** toolbar button displays a reference list with a nonexistent Case class reference.
- External model reference items do not have a link to a corresponding external model definition.
- When model profiling is copied, the output keeps the same name as the copy source.
- The number of active FLI connections counter can turn negative when FLI threads hang while FLI is disabled and enabled again. This in turn can cause a wrong system time output (APAR PO09790).
- The log message 518 prints the message Ignoring incoming SSL API connection not only for the API but also for all SSL interfaces, for example, MCI, ECI and API. Now, log message 518 displays the correct name of the interface (APAR PO08644).
- The configuration form for collusion and index based evaluation case classes contains the settings **Manual case creation** and **Highlight case alarms in queries**. The settings apply only to regular case classes.

- It is not possible to delete multiple outgoing channel configurations if at least one of them is of type HTTP. The API always responds with NO_PRIVILEGES and aborts the deletion after it encounters the HTTP channel configuration.
- Enhanced the error logging for API requests, for example, interruptions. Now, log message 0459 is written by default in the system logs.

Download instructions

Download IBM Safer Payments 6.3.1.02 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release date	Language	Size
IBM Safer Payments 6.3.1.02 download link	25 Oct 2022	English	151.95 MB

For information about using Fix Central, see [Fix Central help](#).

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_3_1_02.zip

```
d61e9709ae0b93e924ec1d683bfd3bd08dbb6e57cbaa1dde6000f94a8383c4b2
```

- MD5

SaferPayments_6_3_1_02.zip

```
b1474594c75e3ce16ad761c5fbfd1cc0
```

Chapter 10. 6.3.1.03 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.3.1.03.

This release changed the version number from 6.3.1.02 to 6.3.1.03. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.3.1.03 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.3.1.03 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [6.3.0.00 Update information](#)
- [6.3.0.01 Update information](#)
- [6.3.0.02 Update information](#)
- [6.3.0.03 Update information](#)

- [6.3.1.00 Update information](#)
- [6.3.1.01 Update information](#)
- [6.3.1.02 Update information](#)

6.3.1.03 Update information

- Added log messages 850 and 851 to monitor disk access of attributes. Log message 850 is enabled if deferred writing is enabled. No action is required if there is no external log monitoring.
- Now, when a message is recomputed during merging, the computation results and the standard computation results are the same. Previously, the results were different because profilings were calculated for each mandator during recomputation. Then, formulas and rules were computed separately for each mandator. Now, formulas and rules are computed together with profilings for each mandator, which is the same process that is used during standard computation.
- Now, white spaces are omitted in JSON responses on MCI, MQI, KMI, and BDI. Before the update, test that all systems can receive the JSON responses from the interfaces. If they cannot, delay the update and wait until a fix pack is available that allows you to control the white spaces.

Change log

IBM Safer Payments 6.3.1.03 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defects were fixed:

- A crash or data corruption can occur if asynchronous mode is enabled on MCI endpoints (APAR PO09359, PO09964).

Major defects and changes

The following major defects were fixed and major changes were made:

- When external models call systems that reply with the message ID in the response body that uses slightly different JSON formatting, the response is not recognized by IBM Safer Payments and the callout fails. The problem occurs even if, for example, the white spaces between JSON keys and values are different.
- Unconsolidated alarms can cause the application to hang during shutdown.
- In rare situations, a crash occurs with external model components after a remote EMC server is enabled or disabled.
- A deadlock can occur if a simulation is running on a lower-level mandator when a mandator higher up in the subtree runs a golive (APAR PO09978).
- PCI DSS-relevant event log message number 834 is not automatically enabled for audit logs on fresh installations.
- The user interface might crash if an input attribute with categories is added while, at the same time, a compare revision is done.
- A no privilege error is issued if a case moves to another nonexclusive working queue for which the user has no privileges from the **My working queues** page (APAR PO09485).
- On **Cluster > Interfaces > Inbound**, the thread priority selection options are not limited by the respective thread priority limit in the system settings. An option to set a thread priority limit for Kafka endpoints is missing in the system settings. If the thread priority limit for MCI or KMI is lowered, the respective values of inbound endpoints are not updated.
- Mergings cause direct disk access even if deferred writing is enabled.
- Report generation jobs that use outgoing channel configurations mask values of encrypted attributes according to the starting user's privileges and ignore the masking setting of the outgoing channel

configuration. Jobs that are not triggered by a user always mask values and also ignore the setting of the outgoing channel configuration (APAR PO08864).

- If an empty cookie is sent in the HTTP header, it can cause incorrect responses.
- The deletion of large bulk defined risk list entries is slow on the API instance (APAR PO09895).
- If a table filter is activated, the table's vertical scrollbar overlaps the contents (APAR PO09825).
- A crash can occur when rule generation data selection is saved multiple times (APAR PO09925).
- A crash can occur during restoration because the case service is not stopped (APAR PO09950).
- Rule generation creates too many threads, which cause real-time processing to stop for a few seconds (APAR PO09859).
- A crash occurs if a data export is run after the EOD job and it contains a condition or column attribute that is owned by a mandator who ran a logical golive before the running of the EOD job (APAR PO09912).
- A crash can occur if rule generation settings are saved while it is running (APAR PO09917).
- An error message is logged by the donor of a restore if IBM Safer Payments is started with Python 3.x support and at least one Python script is uploaded. The error message ID is 0354 and the text states that a folder named `__pycache__` is skipped for the transfer. Now, the folder is skipped but the error message no longer displays. The restore itself is not impacted.
- If numerous case investigations exist, some cases do not have a working queue (APAR PO08747).
- IBM Safer Payments closes the connection early when it receives a SHUT_WR TCP message on the MCI. This can prevent sending an MCI response. It happens mostly when MCI Bypass is enabled and active (APAR PO09918).
- Stopping deferred writing in system configuration or during shutdown might lead to loss of data.
- If you generate rules, and then click **Explore all indicators**, percentages in the **Amount**, **Hit rate**, and other columns are incorrectly rounded depending on the decimals of the attribute (APAR PO09951).
- Changes that are made to certain fields of some revision elements are not shown in the compare revision and audit trail of the model revision.
- If element generation threads are configured to be greater than one, rule generation results are not accurate, and might be different between multiple runs.
- In rare situations, an element can be saved with a name that is already used, which invalidates the configuration (APAR PO09938).
- In rare situations, a crash can occur after a golive when a query is started during the golive.
- Rule actions in preprocessing rules can be defined but are never run (APAR PO08429).
- An instance can hang if you stop a simulation that was started as workflow with rule designer enabled. Shut down is prevented.
- A crash can occur if a case is opened whose masterdata uses a categorical attribute but the index node is invalid (APAR PO09931).
- A generate report job can fail if it computes a fraud mark report that processes a record that is marked as fraud by a deleted user (APAR PO09967).
- Potential security issues exist in some external statically linked server libraries. Updated `Libcurl`, `librdkafka`, `libxml`, `opencv`, `lib`, and `zstd` to the most current version.
- During merging, recomputation messages are computed differently than during normal computation.
- When a merging is recomputed, the MDC oldest URID on an attribute can be set to a value before the attribute is created. Queries then contain unexpected results. Also, the MDC oldest URI is then smaller than DDC oldest URID (APAR PO09756).
- Logs do not show who sent the signal (APAR PO09958).
- Multiple regolives that are run and queued at the same time might result in FLI errors and failed golives on remote instances (APAR PO09970).
- Logs for simulation show the user name.

- Realtime computation performance is slow if many outputs and mappings are processed (APAR PO09955, PO09959).
- During golive, bypass is activated after deferred writing and jobs are stopped. However, stopping them can take time during which latencies can occur (APAR PO09956).
- A crash can occur if a save request for a persistent connection outgoing channel configuration is sent without a connectionPoolPriorities field.
- Primary URID and Primary Instance ID are not printed when the Outgoing Configuration Channel message is sent by a case action, and the message is not archived when delivery fails (APAR PO09949).
- Updating a persistent outgoing configuration channel is slow.
- If an instance's bypass setting is changed, the change is not applied (APAR PO09957).
- An invalid HTTP response is returned if the simulation instance is different than the API instance and the response is larger than 3000 characters.
- SSL settings to reject TLS 1.0 and TLS 1.1 connections are not enabled by default for MCI, ECI, and API.
- During a logical golive, the instance status is set to waiting for interlock and stays this way until a structural golive is done. This also happens when interlock is disabled in system configuration (APAR PO09969, PO10007).
- MCI, FLI, BDI, MQI, and KMI can be enabled while a maintenance function is running that requires them to be disabled (APAR PO09788).
- If settings on **Administration > System > Configuration** are changed, some warning and error messages are not issued.
- MCI responses of type JSON contain unnecessary white space.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- In the Output Attributes table, the meta attribute **case class** displays inconsistent values.
- When a simulation is run without attributes that require simulation, the message **simulation initializing** is displayed. The simulation appears to be in progress when, in fact, it is finished.
- If a master key is changed, the case class configuration is not written to disk even though case classes can use encrypted attributes in condition forms.
- Improved the online help for Main Memory settings, MCI StatusResponse example, and Fraud marking reports. Added more content to several topics, for example, case types, internal model generation, outgoing channel configuration, and inbound endpoints. Improved user interface text about feedback. The language options in the user interface are now always listed in their own language (APAR PO09422).
- If the SCI communication to a remote instance fails and thus does not prevent updating a revision while a remote analysis is running, the analysis is not stopped upon the revision update (APAR PO09927).
- If space is limited in the user interface, multiselect dropdown fields sometimes do not display all options.

Download instructions

Download IBM Safer Payments 6.3.1.03 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release date	Language	Size
IBM Safer Payments 6.3.1.03 download link	27 Jan 2023	English	160.31 MB

For information about using Fix Central, see [Fix Central help](#).

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_3_1_03.zip

```
98fd39f558fc1a898e40eded668b429e88d8d2e38785913b088ca30f5564b50e
```

- MD5

SaferPayments_6_3_1_03.zip

```
7ec61003d1937ea9161a1fd275de7260
```

Chapter 11. 6.3.1.04 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.3.1.04.

This release changed the version number from 6.3.1.03 to 6.3.1.04. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.3.1.04 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.3.1.04 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [6.3.0.00 Update information](#)
- [6.3.0.01 Update information](#)
- [6.3.0.02 Update information](#)
- [6.3.0.03 Update information](#)
- [6.3.1.00 Update information](#)

- [6.3.1.01 Update information](#)
- [6.3.1.02 Update information](#)
- [6.3.1.03 Update information](#)

6.3.1.04 Update information

- Pmml files that are larger than 500 MB can now be uploaded. Parsing pmml files can temporarily but significantly increase memory consumption on the server side. The increase is larger for larger files.
- Previously, if retention by time was used, empty DDC files were created for attributes that are not stored. The problem is now fixed but it is best to remove the DDC files from the file system. Use the file name to identify the DDC files for attributes. The files contain the attribute UID in their file name.
- If you encountered problems with attribute purging before the update (log message 520), force a full purge of all affected attributes after the update. First, create a challenger revision and deactivate purging for each affected attribute. Then, activate purging again and perform a golive. A full purge is performed during the next end of day job. All the old transaction records are securely delete from memory and disk.
- During the upgrade, it is not possible to create a new mandator while different instances are on different versions. If you need to create a new mandator, wait until all instances are upgraded.
- To improve defense against a Slowloris DOS attack, set the following new fields:
 1. Click **Cluster > Settings** and click an instance.
 2. On the **Interfaces > Message command interface** tab, select **Enable incoming connection limit**. Enter a connection threshold in **Incoming connection limit**.
 3. Repeat on the **Interfaces > Application programming interfaces** tab.
 4. Repeat for other instances.
- Set the new **System > Configuration > Interfaces > Pretty print JSON response** option to control whether white spaces are included in JSON responses. In the 6.5.0.01, 6.4.2.02, and 6.3.1.03 releases, a change was introduced that omitted white spaces in the JSON responses over MCI. Now you can control it.

Change log

IBM Safer Payments 6.3.1.04 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defects were fixed:

- If you run a rule report with context while a remote simulation is active, a deadlock might occur on the remote instance (APAR PO09991).
- If a logical golive is run and an index node is deleted, index-dependent element values are changed when the new index node replaces the old one. The problem occurs whether the index node is deleted by a purge or normal deletion (APAR PO09972).
- When retention by time is used, the end-of-day job creates DDC files for attributes that are not stored. The files cause the instance to crash when the affected attributes are stored during golive.
- Improved defense mechanisms against a Slowloris DOS attack. Added **Enable incoming connection limit** and **Incoming connection limit** to the **Cluster > Settings > Interfaces > Message Command Interface** tab and **Application programming interface** tab. The fix is for CVE-2023-27556.
- A deadlock might occur during the end-of-day job or when cases are archived if users perform additional case investigation activities, for example, take over or transition a case.

Major defects and changes

The following major defects were fixed and major changes were made:

- Deferred writing is not interrupted when certain elements are saved, which causes processing to stop for a long time. Now, if bypass is enabled, it is activated when mandators, working queues, and messages are saved. The save takes a few extra seconds during which time the save button is disabled.
- A deadlock can occur if rule generation is running on a lower-level mandator when a mandator higher up in the subtree runs a golive.
- Signal handlers are missing for SIGILL and SIGBUS.
- Go to **Administration > Messages**, select a message whose type is flat xml format, click **Generate a report of this message**. The **Transaction Message Report** page opens. **XML Message Sample** under **Model Response** is not readable if the text is too long.
- If a user triggers a shutdown while IBM MQ messages are being processed, IBM Safer Payments might exit with a backtrace. The transaction that caused the backtrace does not finish computing (APAR PO09933).
- A crash might occur when a file with an empty path for the period is opened while the index is being rebuilt.
- If many cases exist, case selection takes a long time (APAR PO10010).
- On **Model > Modeling > Attribute Settings > , > Production data available (no simulation necessary)** is displayed even if the data is available only in DDC and therefore unusable for simulation computations. Now, **Production data available in MDC (no simulation necessary)** and **Production data not available in MDC (enable it for simulation to prime from DDC)** display correctly (APAR PO09974).
- On restart or key activation, a deadlock occurs and further logins are prevented if you enter an incorrect PIN but with the correct number of digits. The problem occurs if extended authentication is enabled with two-factor authentication that is based on one-time password (OTP) (APAR PO09988).
- In notifications that are sent to users, the timestamp is incorrect (APAR PO09965).
- If a simulation and a golive are started simultaneously, the golive cannot start until the simulation initialization finishes.
- The export data job collects attributes from only the first mandator (APAR PO09995).
- When the API is changed from disabled to enabled on an instance, maintenance functions that are running on it are interrupted.
- The description for external model components is difficult to find in the online help. Improved the description and added a help button to the **Model > Scoring Engine > Model components > Own Model components > External model component** page.
- On **Model > Profiling > Calendars**, the **Support standard deviation** checkbox is missing.
- The status of remote instances changes to Unreachable even if it is reachable (APAR PO09863).
- Larger random forest, decision tree, and boosted tree models cannot be uploaded due to a 500 MB limit on uploading pmml files.
- On **Model > Data model > Lists**, prepending or reordering entries in the **Output Values** section corrupts the values of other entries (APAR PO09954).
- Statistics, Rule analysis, Rule optimization, and Rule Scoring under **Model > Modeling > Analyses** display [Object object] in some columns rather than actual values (APAR PO09596).
- When a table is on a page that is read-only, the filters do not work (APAR PO09842).
- The server might crash if invalid xml is uploaded in a pmml model file (APAR PO09881).
- The simulation report lists all attributes, including attributes that do not take more memory for simulation and require no additional user operation.
- A deadlock might occur if a golive is started for the same mandator or head mandator of a revision where a simulation query (all types) is already running. A simulation query of type rule report is also started when a rule report is started (APAR PO09985).

- Added **Cases not closed** to **Cluster > System monitoring > System internals**. It displays the number of current non-closed cases.
- The timestamps in all tooltips for reports display in UTC instead of the user's time zone (APAR PO09984).
- On **Monitoring > Defined risk lists > Defined risk list entries**, an invalid JSON error is issued if the defined risk list's **Output attribute** was changed from a categorical to a non-categorical attribute with **Enable category selection** being selected.
- On **Investigation > Queries > CPP selection**, the save button is disabled if the user is defined at a submandator level (APAR PO09968).
- When an API request of `getIndexes` with null **revision** value is sent, a backtrace is created.
- When a golive report is initiated for a revision, a log message `Internal model generation stopped for revision ...` is displayed. It displays even if the revision is not running internal model generation.
- When outdated attribute values are purged, the purge fails for attributes that are not stored in MDC. Fatal error log message 520 is written for each attribute, which is correct. Log message 194 is also written, which is incorrect. It means that the values were successfully purged, which is untrue.
- If a golive is started on an unmodified revision of a new mandator, the remote instances might be invalidated (APAR PO09982).
- An instance might shut down during golive if not stored attributes are missing, and they are used in a condition for a submandator (APAR PO09977).
- On **Cluster > Interfaces > Inbound**, the **Suppress meta information in JSON** checkbox is now cleared by default when a new inbound endpoint is created for dynamic or JSON message types. If the checkbox is selected, complications might occur when JSON transactions are sent through the MCI because `messageID` is suppressed.
- If **Enable logical golives** is cleared, golives are processed as structural golives. However, the GoLive report displays it as logical.
- On **Administration > Case management > Case classes**, added the checkbox **Exit case investigation screen after transition**. If it is selected for a transition, after the transition is run, investigators are returned from the case investigation screen to where they opened the case from.
- Added a scroll bar to pages that display a list of suggested expressions in conditions, conclusions, and formulas.
- If you export a table that contains sensitive data and enter an invalid password, the error `New password is invalid because it is [description]` is displayed. The password is incorrect but the error does not match the description in the error message.
- Golive is blocked, and the instance goes into maintenance mode if its status is `offline`, `startup`, `starting services`, `synchronizing`, `restore status` (`RESTORING_DONOR`, `RESTORING_RECIPIENT`, `STATUS_LOCKDOWN`), or any status that is related to key activation (`WAITING_FOR_KEY`, `MASTER_KEY_CHANGE_ACTIVE`, `MASTER_KEY_CHANGE_PASSIVE`, `MASTER_KEY_CHANGE_FINALIZE`) (APAR PO09962).
- When an instance is restarted, user groups that are assigned to case transitions on case classes are lost (APAR PO09987).
- The online help does not highlight searched keywords in its results.
- Merchant monitoring rule **6.2.2.1 MasterCard acquirer authorization monitoring requirements - Repeated authorization requests for the same cardholder account** is missing in the user interface.
- Some records are not written to DDC if the deferred writer is interrupted soon after startup (APAR PO10008).
- For cases that are created manually or by query, server-side validation does not occur for non-negative case scores.
- When a TCP connection is being established and a problematic message header is processed, the connection cannot be reestablished because of incorrect state variables. The problem is detected with `bypass` (APAR PO10014).

- Omitting white spaces in JSON responses on MCI, MQI, KMI, or BDI might break the communication from external systems to IBM Safer Payments . Added **System > Configuration > Interfaces > Pretty print JSON response**. Use the new option to control whether white spaces are included in JSON responses.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- In the online help, the **Batch Data Interface Overview** topic contains a broken link to a topic about jobs.
- A fatal log message might occur for the FLI buffer, followed by log message 0514 during a restore.
- On various report pages, error text is incorrect if you enter a from date that is after a to date.
- An error is issued when temporary cases are archived because a temporary audit file is missing (APAR PO09494).
- On **Model > (select a challenger revision) > Simulation**, click filter. On **Instance selection**, the **Refresh instances table** toolbar action displays the wrong icon.
- On **Administration > System > Configuration**, click **Download IBM Safer Payments Configuration**. The **Instance** field displays partial rather than full instance names because it is too short.
- The **Include ddc** checkbox is not displayed on **Monitoring > Merchant monitoring rules**. Now, it correctly displays for certain rule types if **Merchant monitoring rules may include ddc** in the system configuration is enabled.
- Increased CPU and speed for slow calculations when date ranges that are based on server time are used in data selections (APAR PO09253).
- Case consolidation performance degrades significantly with the number of open cases (APAR PO10011).
- Message logging for the index repair function contains text about rebuild rather than repair. It also does not produce a progress log message.
- On **Administration > Case management > Case classes**, if there is more than one definable transition and you change the target case class for one transition, the list of case state options for all the definable transitions changes.
- In conditions, if you focus on an expression field and press the space bar to see the context menu, it does not display near the expression field (APAR PO09492).

Download instructions

Download IBM Safer Payments 6.3.1.04 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release date	Language	Size
IBM Safer Payments 6.3.1.04 download link	20 Apr 2023	English	152.97 MB

For information about using Fix Central, see [Fix Central help](#).

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_3_1_04.zip

```
77008c79ef9df198219bbe9d8d33978a1046488dfff29a2e0bed7a47eed2c157
```

- MD5

SaferPayments_6_3_1_04.zip

```
b78c36f9ceacbc967db624bed8070ee6
```

Chapter 12. 6.3.1.05 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.3.1.05.

This release changed the version number from 6.3.1.04 to 6.3.1.05. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.3.1.05 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.3.1.05 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [6.3.0.00 Update information](#)
- [6.3.0.01 Update information](#)
- [6.3.0.02 Update information](#)
- [6.3.0.03 Update information](#)
- [6.3.1.00 Update information](#)

- [6.3.1.01 Update information](#)
- [6.3.1.02 Update information](#)
- [6.3.1.03 Update information](#)
- [6.3.1.04 Update information](#)

6.3.1.05 Update information

- Introduced a user-configurable search depth. It is used for tuning the system performance regarding the remote lookup index search. It defines the maximum number of records that are checked on the index sequence when it searches for the target record.
- Broken query files no longer prevent a startup. Additionally, erroneous files that cannot be loaded during startup are now renamed from `xxx.iris` to `xxx.error`. Log message 856 is written.
- If MCI bypass is enabled and active, the instance now responds with status Ok/Bypass instead of the actual instance status. This usually happens during golive or other maintenance mode activities. Also, the instance no longer mixes different headers. If an HTTP header is sent, IBM Safer Payments uses only this information for bypass forwarding.
- The fields **lockTimeoutSeconds** and **lockTimeoutCountdownThresholdSeconds** in the `saveSettings` request have been updated to be named **activityBasedSessionTimeoutSeconds** and **activityBasedSessionTimeoutCountdownThresholdSeconds**.
- Previously there was a **mandator** parameter that needed to be sent in with the `confirmGolive` API request. This parameter is no longer used.
- Improved the function that converts a time string to a UTC timestamp. Its results were incorrect in certain time zones. The function is used by the jobs scheduler for monthly jobs, group by queries, reporting queries, and certain merchant monitoring reports (ones with intervals in the reports). If you use these features and are in a timezone with a 30-minute offset, for example, Portugal, your results after the upgrade will be slightly different. In particular, you might need to change the time of your monthly jobs.

Change log

IBM Safer Payments 6.3.1.05 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defects were fixed:

- In rare situations, backtraces are printed when sockets are being closed. The problem usually occurs when an instance is shutting down.
- Users who do not have the privilege to view the system configuration are not allowed to perform a golive (APAR PO10066).

Major defects and changes

The following major defects were fixed and major changes were made:

- Improved security regarding user passwords. On **Administration > System > Configuration**, added **Use common password blocklist**. If it is enabled, you can upload a file that contains a list of weak passphrases. When users change their password, it is checked against the list.
- Model components of PMML boosted trees always use `multipleModelMethod modelChain` even if the model file defines a different method (APAR PO09869).
- Parser errors in uploaded PMML files do not create error feedback in the user interface. Startup, the golive report, golive, and simulation do not check for parser errors in uploaded PMML models, which might result in missing PMML computations. Also, the PMML model outputs are sometimes not computed during message computation on the API instance. The problem occurs when the champion revision is compared to a challenger revision and certain changes are done to the PMML model in

the challenger. In particular, the problem occurs if the PMML model file is reuploaded or the field mappings are changed between the revisions. The problem does not occur on non-API instances (APAR PO10162).

- During startup, defined risk list files cannot be loaded if they contain empty values (APAR PO09474).
- If a defined risk list entries file of an unsupported encoding type is uploaded, no further risk list files can be uploaded. The problem also occurs if the file contains empty lines that end in a Linux® line ending (APAR PO09439).
- Performance slows down if the remote lookup index search cannot find the target record (APAR PO09919).
- If deferred writing is enabled, the rollover of calendar periods might cause backtraces and fatal errors.
- If a docx case action is saved again after an attached template file is uploaded, an error is issued when the case action is sent.
- Some golive messages have unnecessary color indicator tags.
- There is no valid response for MCI status requests during golive or when no unique message ID is set in the status request.
- The **Fraud Flag** meta attribute column displays in the query result table even if the fraud column is not selected in the query definition. The problem occurs if **Administration > System > Configuration > Direct transaction marking in queries** is selected. Also, the column incorrectly contains URID column information. Hyperlink queries do not work if the URID and fraud columns are not selected as columns (APAR PO09989).
- PMML tree-based models output negative probabilities for specific PMML input files. The problem occurs for random forests where the record count is included only in the `ScoreDistribution` element, and not on the node.
- If a defined risk list entries file contains an entry with empty characters at the beginning of its line, the upload stops. The instance must be restarted to upload more entry files.
- If a user logs out during the upload of a defined risk list entries file, the upload fails. The instance must be restarted to upload more defined risk list entries.
- If a table contains an empty cell, it displays as undefined in a csv export. Also, if the sanitize csv setting is enabled and it contains an empty cell, it cannot be downloaded.
- Improved security when multiple user login attempts are made with the correct username but wrong password. Now, when a user enters a wrong password, the login button is disabled for five seconds. Backend security was also improved.
- Added **Use maximum session time (seconds)** to **Administration > System > Configuration > Interfaces > Application Program Interface > .** It controls how long a session remains open, regardless of user activity. It is optional.
- In rare situations, a crash might occur when a running simulation that uses the `in_chunks` simulation method is disabled (APAR PO10012).
- When logical golives are enabled in the system settings and a logical golive is done on a mandator of the key performance indicator or status alarm indicator or parent mandator, after the EOD job the KPI or SAI returns 0 if it has any condition. The KPI or SAI works again when it is saved after the EOD (APAR PO09998).
- Crash backtraces are limited to 30 entries (APAR PO10031).
- Startup continues without champion revisions being read.
- The operating system delays the memory allocation, which worsens the situation when running out of memory (APAR PO10022).
- On **Investigation > CPP selection**, filter preferences are not saved correctly and are reset when you navigate away and then return to the page.

On **Investigation > Case selection**, date range preferences are not updated correctly when you navigate away and return the first time. Return a second time, and they are updated.

- In case investigation, if you batch close multiple cases from multiple case classes, duplicate case close codes display in the Bulk Close selection window (APAR PO09983).
- Click **Model > [revision] > Profiling > Patterns**. When the pattern is displayed, **Stencils > Records** conditions are not correctly populated. The attribute names and operators are not displayed in the conditions. They become visible when you edit the pattern (APAR PO10025).
- The **Rule Generation Data Overview** and **Generated Rules** tables under **Model > Modeling > Model Factory > Rule** display [Object object] rather than actual values. The problem occurs only if **Verification** is selected.
- On **Administration > Case management > Case actions > HTTP Case Action**, **Content type addition** cannot be set if HTTP output channel configuration is used (APAR PO10015).
- If **Hide logout button** is selected on **Administration > System > Configuration > Authentication Settings**, the logout button still displays on all instances (APAR PO09324).
- Remote simulation does not work if OIDC authentication is used (APAR PO10027).
- Go to **Investigation > Queries > Queries** and click **Settings**. If you select **Uid**, the **Uid** column does not display in the table. Also, the mandator Uid table column is **Uid** but it should be **mandator UID** (APAR PO09926).
- A crash might occur when an API request is manually sent to confirm a golive. The problem occurs if the mandator doesn't match the revision of the request.
- On **Administration > System > Configuration > Misc**, the time in **Start End of Day (EoD) job** is specified in UTC instead of the user's time zone.
- On **Administration > Job Settings > Job** the **Daytime** field for a monthly scheduled job does not show the set time zone, which might lead to a wrong input for the job schedules. Furthermore, the set time might have an incorrect offset in certain time zones (APAR PO09948).
- Updated OpenSSL to 1.1.1u and libxml2 to 2.10.4 to address potential security issues.
- In **Investigation > Queries > Group by queries**, memory usage is abnormally high if **Account analysis** is enabled and the **Meta attribute** for Account is of type text. Memory is not released even after the group by query is deleted. A crash might occur due to low memory (APAR PO10053).
- The save button is not disabled when a save is performed. Duplicate saves might cause other problems.
- In rare situations, non-API instances might deadlock after working queues are updated. A crash might occur if you are working with working queues while simultaneously changing working queue configurations (APAR PO09861).
- On **Cluster > System monitoring > Event log messages**, the ID column is not displayed by default.
- The default file names for the Diffie Hellman file and CA certificate file are incorrect. They are not the same as the file names that are stated in the Implementation Guide. The files are used by the API and ECI when TLS is enabled.
- Improved the performance of case consolidation. Previously, it sometimes loaded slowly, which caused a buildup of unconsolidated alarms and FLI buffering.
- A deadlock might occur if a defined risk list is opened and written to file simultaneously (APAR PO10049).
- Improved the performance of printing expressions to file and to the user interface. Golives might also be faster.
- Golive is sometimes slow because invalidated revisions are unnecessarily rewritten during the process.
- A golive on a top mandator issues the following error 0321 Revision xxx configuration error: FATAL_ERROR and deleted the invalidated revision to prevent the error from occurring again. The problem occurs if an invalidated revision of a submandator uses an attribute from a top mandator, and the attribute is deleted on the top mandator (APAR PO09992).

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- A golive on a top mandator issues the following error 0321 Revision xxx configuration error: FATAL_ERROR and deleted the invalidated revision to prevent the error from occurring again. The problem occurs if an invalidated revision of a submandator uses an attribute from a top mandator, and the attribute is deleted on the top mandator (APAR PO09992).
- Configuration and user files are not loaded sorted. If there are errors when files are loaded during startup, different startup configurations might exist on different systems.
- If the ignore_encryption debug parameter is enabled, some instances fail to start due to errors in expressions.
- Improved performance of queries and random forest computations.
- XML responses to transactions are malformed if **Administration > Mandators > Settings > Include profiling and component statistics in model responses** is enabled.
- On instances where the API is not enabled, users cannot update bypass settings and password files for some interfaces (APAR PO09466).
- When querying a data range that is only available in DDC for the meta attribute system time, the data selection textbox wrongly gives an error that the data from the selected date and time is not available even though the **Include DDC** setting is enabled. The impact is only on the user interface. The required data is retrieved after saving the page and running the query (APAR PO10009).
- Removed **MCI message format** on **Administration > System > Configuration > Interfaces > Message Command Interface**. The removal has no functional impact.
- When the simulation analysis runs on more than one thread, it occasionally returns an incorrect result.
- A misleading log message is printed if you delete a mandator that is referenced by a head mandator's simulation, simulation query, or analysis data selections (APAR PO08463).
- Improved help text and tooltip for **Purge outdated entries securely** on **Model > Data model > Inputs > General Settings**.

Download instructions

Download IBM Safer Payments 6.3.1.05 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release date	Language	Size
IBM Safer Payments 6.3.1.05 download link	20 July 2023	English	153.05 MB

For information about using Fix Central, see [Fix Central help](#).

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_3_1_05.zip

```
efd08a5b2b374728a1d15dd19cf4c720de11abaa7e4f47484608c743abc7b44c
```

- MD5

SaferPayments_6_3_1_05.zip

cc6765220e2b950cde3916b3ee390b9d

Chapter 13. 6.3.1.06 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.3.1.06.

This release changed the version number from 6.3.1.05 to 6.3.1.06. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.3.1.06 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.3.1.06 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.




If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [6.3.0.00 Update information](#)
- [6.3.0.01 Update information](#)
- [6.3.0.02 Update information](#)
- [6.3.0.03 Update information](#)
- [6.3.1.00 Update information](#)

- [6.3.1.01 Update information](#)
- [6.3.1.02 Update information](#)
- [6.3.1.03 Update information](#)
- [6.3.1.04 Update information](#)
- [6.3.1.05 Update information](#)

6.3.1.06 Update information

- Before performing the upgrade, disable FLI on existing instances. The existing version cannot handle the FLI message for deleting/enabling/disabling the defined risk list entry from the new version.
- The audit trail for defined risk lists is now written to its own file, which is named `definedRiskListAuditTrail_[uid].iris`. It is automatically updated. Back up the original file before the upgrade.
- When manually marking records as genuine or fraudulent from query results on **Investigation > Queries > Queries**, it is now possible to control which notifications are selectable. Enable notifications by setting the new **Available for manual fraud marking** checkbox on **Administration > External system integration > Notifications**. Grant users the privilege to trigger notifications by assigning the new **Trigger notifications on fraud marking** role privilege on **Administration > User management > Roles**. By default, no notification are selectable, and no users have the privilege to trigger notifications.
- On **Investigation > Investigation > Case search** and **case selection**, added an  (execute) icon. Now, a search starts only when  is clicked or the Enter key is pressed. The page is refreshed only when  is clicked.

Change log

IBM Safer Payments 6.3.1.06 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defects were fixed:




- Simulation order for final rules and preprocessing rules is different from the order in real-time computation (APAR PO10114).

Major defects and changes

The following major defects were fixed and major changes were made:

- On numerous pages in the user interface, single select component dropdown values are cut off if they display at the bottom of the page. The same problem occurs for autocomplete dropdowns for condition forms and for color picker components (APAR PO09884, PO09853, PO09645).
- On **Investigation > Queries > Masterdata**, values are not correctly rendered if one attribute is used with categories in two masterdata with different insertion conditions (APAR PO10041).
- Status alarm indicators do not display a title if a tooltip is unavailable (APAR PO09575).
- External queries that update encrypted masterdata block FLI (APAR PO10058).
- A deadlock might occur if simultaneously a case that has reporting attributes and queries is opened and a golive is run.
- A crash might occur if, on **Cluster > Interfaces > Outgoing channel configuration**, an outgoing channel where **Target** is set to **Persistent connection** is deleted and an error occurs (APAR PO10044).
- When defined risk entries are deleted, synchronization is slow.
- A deadlock might occur if there is an automated transition to close the case (APAR PO10042).

- A crash might occur or backtrace be generated if case transitions are queued. Later, all are performed at the same time in parallel. The problem might also happen if a case transitions while the case actions of a case close code are being changed (APAR PO10050).
- There is no setting to prevent end-of-day jobs from running. Now, added an **End of day (Eod) job** checkbox on **Administration > System > Configuration**. If selected, end-of-day jobs are allowed to run. If cleared, they are prevented. The default is selected. Contact IBM Support before using.
- On **Model > Challenger > Rules**, when a rule report without context is run, the **All Rules** page is displayed. Instead, the actual rule report page should be displayed. Also, if you navigate away from the **Simulation Report** page by clicking on another menu entry, the **All Rules** page is displayed (APAR PO10070).
- When golive is started, it might get blocked if simulation queries and rule reports that are already running cannot find records. While the golive is blocked, it does not start/run and it waits until the simulation query or rule reports finish (APAR PO10047).
- The digit and decimal group separators for numeric expressions are not correctly enforced. Also, the wildcard values are truncated on the user interface (APAR PO09999).
- DDC files are not removed during golive after an element is deleted if the element already existed during startup.
- Data synchronization is slow when it writes an audit trail for a large defined risk list.
- Some HTTP requests are not producing log messages. The lack of log messages makes problem resolution difficult for IBM Support.
- A crash might occur if multiple requests to copy a retired revision are made while a golive is running (APAR PO10077).
- A deadlock might occur when a simulation rule report query is started. Then, before that is finished, a rule is deleted that has a conclusion or masterdata rule action (APAR PO10075).
- During computations like golive, other computations like queries and simulation might pause while the instance tries to enter maintenance mode, even if the instance is not ready to enter maintenance mode. Now, the queries and simulations are paused only when the instance enters maintenance mode (APAR PO10085).
- Simulation performance is slower than expected. Now, simulation performance is still slower than real-time performance in most situations, but it is improved, especially when using many elements.
- Golives and end of day jobs are blocked while reporting queries are computed (APAR PO10043).
- On **Administration > Jobs > Settings > Export data jobs**, if multiple mandators are selected on the **Data Selection** tab, duplicate attributes display on the **Data output** tab. The problem occurs if the selected mandators inherit attributes from the same parent mandator (APAR PO10048).
- Attributes selected for inclusion in the data output of a data export job may be excluded from the export file (APAR PO10087).
- Golives cannot proceed if other revisions are running rule generation (APAR PO10073).
- On **Administration > System > Configuration**, an access error is issued even if the user has the privilege to view the system configuration (APAR PO10036).
- When manually marking records as genuine or fraudulent from query results on **Investigation > Queries > Queries**, there is no control over which notifications are selectable. Now, notifications can be configured to be selectable by setting the new **Available for manual fraud marking** checkbox on **Administration > External system integration > Notifications**. The **Trigger notifications on fraud marking** role privilege on **Administration > User management > Roles** is also new. It controls the ability to trigger notifications.
- Binary StatusRequests values in MCI that are non-zero are interpreted as StatusRequests. Now, only values of 1 are interpreted as StatusRequests.
- A crash might occur if working queues are saved while they are computed (APAR PO10059).
- When records are marked as fraud on **Investigation > Queries > Queries**, negative fraud values cannot be selected in **Fraud value** (APAR PO10083).

- On **Investigation > Investigation > Case search** and **case selection**, a search is triggered with every keystroke that is entered in **Search term**. It causes numerous unnecessary server requests. Now, a search starts only when the newly added  (execute) icon is clicked or the Enter key is pressed. Auto refresh was added to the case search page. Whether auto refresh works depends on the **System configuration > System > Page auto refresh > Investigation** setting. Auto refresh on case search and case selection is done only when  is clicked. If a filter on one of the pages is changed, auto refresh stops until  is clicked again (APAR PO10100).
- On **Investigation > Investigation > Case search**, the search does not respect the **Maximum cases shown on selection table** setting. It also takes longer than expected.
- Broken data of encrypted masterdata after startup if encryption of the index attribute is getting enabled and no entry was added yet on the masterdata index. Additionally, there is broken data of attributes after startup, if the encryption of the attribute changed and if no record was loaded yet on the instance.
- Unnecessary files are included in the installer.
- Added information about the **Maximum session timeout** field to the online help. It was missing. The field is located on **Administration > System Configuration > Interfaces > Application Programming Interface**.
- On **Model > [mandator revision] > Model components > PMML model component > PMML Model Import**, the tooltip for the download icon is not formatted correctly.
- In the online help topic for **Cluster Golive**, there is a broken link to **MCI bypass**.
- On **Model > Modeling > Analyses > Statistics**, after visible columns are configured, the header of the **Name** column is empty.
- On **Investigation > Queries > Queries**, for queries with empty results, **False alarms per hit** is incorrectly formatted (APAR PO09255).
- Timestamps in the latency report files are stored in system timezone, but they should be stored in UTC+0 timezone. When the system timezone setting is not UTC +0, the latency timestamp in system internals is different from the system time of the same record in query output (APAR PO09334).
- On **Cluster > System monitoring > Settings > [instance] > Interfaces**, users with read-only access cannot switch between the tabs in the **Interfaces** section (APAR PO10093).
- In numerous places in the user interface, when a date is chosen in a calendar, the text is not localized with the user's language (APAR PO10104).
- On **Model > [model] > Profiling > Calendars**, if **Calendar Period** is changed, for example from daily to weekly, calendar dates are then incorrectly calculated. After the instance is restarted, the calendar values are calculated correctly from that point forward.
- Improved the documentation to more clearly communicate that there is a risk of a malicious attack when file attachments on cases are uploaded. It is a best practice to implement a third-party virus scanning tool. The online help for case attachments and the configuration setting that enables case attachments were improved. The IBM Safer Payments Implementation Guide was also improved.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- The MTID (message type ID) of tracked messages does not display in the latency report.
- On **Administration > Roles > [user]**, in the tree structure for privileges, **Memory control** is incorrectly located under **Administration**. Now, it is located under **Cluster** in the tree structure (APAR PO10061).
- On **Report > Report > Investigator > [report]**, some fields are missing text translations (APAR PO09615).
- Updated Libcurl to version 8.2.1.
- The rule performance report file is not removed from the DDC even after disabling the rule performance report and restarting the application (APAR PO10033).

- In numerous places where lists are defined in the user interface, after an output value is deleted, the condition values in other outputs in the list are corrupted (APAR PO10067).
- A small latency spike occurs during the deferred writing cycle because of the time that is consumed for the deletion of the calendar period file for the rollover (APAR PO10082).
- On **Administration > System > Configuration > Interfaces > FastLink Interface**, an error message for Receive timeout (seconds) is incorrectly issued.
- Improved the tooltip text for the **All connections** checkbox and **Connections from** text box. They are located on **Cluster > System monitoring > Settings > > [instance] > Interfaces > Message Command Interface** and **Cluster > System monitoring > Settings > > [instance] > Interfaces > Application Programming Interface**.
- Improved the tooltip text for the **All connections** checkbox and **Connections from** text box. They are located on **Cluster > System monitoring > Settings > > [instance] > Interfaces > Message Command Interface** and **Cluster > System monitoring > Settings > > [instance] > Interfaces > Application Programming Interface**.
- Now, on **Administration > System > Configuration > Interfaces > Application Programming Interface**, the **Session timeout** and **Maximum session timeout** fields must be greater 60 seconds. Also, a warning is issued if they are set to a value between 60 and 300 seconds.
- On **Monitoring > Defined risk lists**, the table contains two **Mandator** columns. It should contain a **Mandator** column and a **Mandator UID** column. The same defects also occur on **Monitoring > Merchant Monitoring Rules** and **Monitoring > Index Based Evaluations**.
- On **Model > [mandator] > Scoring engine > All Rules**, the column headers are all **UID**. Now, they are **Ruleset UID**, **Revision UID**, and so on.
- On **Model > [mandator challenger] > Modeling > Simulation > Queries**, the header contains the placeholder text, `Simulation Queries {0}`. The text was removed.
- On **Model > [mandator challenger] > Modeling > Rule Scoring > Rule Scoring Results**, the plus icon in the toolbar is disabled.
- On **Model > Modeling > Model factory > Rule**, in the CSV export of the table Generated Rules, [Object object] appears in the **Condition** column rather than actual values.
- Added information about FCD response formats to the online help, it was missing.
- Added **Log latencies also for FLI** checkbox on **Administration > System > Configuration > Misc > Log latency violation details**. It controls whether latencies are logged for messages that are computed from FLI.
- When a role is assigned to a user on **Administration > User management > Accounts > [user account] > Mandator Privileges**, log message 370 is not written. It should be.
- HTML formatting tags are sometimes included in golive messages.
- On **Cluster > System monitoring > Settings**, added a **Heartbeat Debugging Status** column to the list of instances.
- On **Model > [mandator] > Data Model > Mappings**, for mapping messages of type **Fcd**, the tooltip for **Start length pairs** contains typos.
- On **Model > [mandator] > Profiling > Formulas**, a vague error message (`_FORMULA_DIVISION_BY_CONSTANT_ZERO_`) displays if an expression is defined that divides by zero. Now, the error message is `Division by constant of zero is not allowed`.

Download instructions

Download IBM Safer Payments 6.3.1.06 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release date	Language	Size
IBM Safer Payments 6.3.1.06 download link	16 November 2023	English	153.02 MB

For information about using Fix Central, see [Fix Central help](#).

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_3_1_06.zip

```
aa31210f242b60f80957bf78551e433b32e7fe89ab502c32c487a0d0782ce995
```

- MD5

SaferPayments_6_3_1_06.zip

```
9b344c7a92b0453f8c496a481f8cea60
```

Chapter 14. 6.3.1.07 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.3.1.07.

This release changed the version number from 6.3.1.06 to 6.3.1.07. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.3.1.07 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.3.1.07 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [6.3.0.00 Update information](#)
- [6.3.0.01 Update information](#)
- [6.3.0.02 Update information](#)
- [6.3.0.03 Update information](#)
- [6.3.1.00 Update information](#)

- [6.3.1.02 Update information](#)
- [6.3.1.03 Update information](#)
- [6.3.1.04 Update information](#)
- [6.3.1.05 Update information](#)
- [6.3.1.06 Update information](#)

6.3.1.07 Update information

- By default tables now show a maximum of 40 columns to improve table loading performance on tables with many columns. More columns can still be enabled in the table settings. In case a user already has preferences for the table then this setting will only apply once the user resets user preferences in the user settings page. Alternatively the number of columns can also be decreased manually on the table preferences of the table that has many columns.
- If you use MQ Interface, the mechanism for setting the MQGET timeout has changed. Now, the maximum MQGET timeout is 3000 ms. The new field, **Repeat empty MQGET**, on **Cluster > Configuration > Instance > MQ Interface** defines how many times the timeout is repeated and avoids reconnections to MQ. For example, if MQGET is set to 3000 ms and **Repeat empty MQGET** is set to 20, the timeout is 600,000 ms. Review your current MQGET timeout value and set **Repeat empty MQGET** as needed.
- Data exports from BDI can now be downloaded by users that have at least execute job privileges for jobs.

Change log

IBM Safer Payments 6.3.1.07 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defects were fixed:

- If both deferred writing and **Reduce DDC access for mergings** are enabled, the write cycle can take a long time. The problem occurs when a large volume of mergings happen that are in the MDC range but they are already written to disk. Also, debug log message 4 now displays the correct number of records that were modified by mergings (APAR PO10121).

Major defects and changes

The following major defects were fixed and major changes were made:

- The user interface might freeze if a table shows many columns, for example, in mappings. Now, columns are, by default, limited to 40. If needed, increase the limit in the table settings. Tables now load faster (APAR PO10029).
- If the MQGET timeout is set to a high value, a long timeout occurs when interfaces are deactivated. Now, the maximum MQGET timeout is 3000 ms. A new field, **Repeat empty MQGET**, has been added to **Cluster > Configuration > Instance > MQ Interface**. It defines how many times the timeout is repeated and avoids reconnections to MQ. For example, if MQGET is set to 3000 ms and **Repeat empty MQGET** is set to 20, the timeout is 600,000 ms (APAR PO10111).
- When the Ctrl+S shortcut is used in the user interface, changes to condition and conclusion expressions are not saved correctly if the expression field is still in focus. The value from the previous field is saved in the expression rather than the changed expression. The same problem occurs when an empty expression in a list expression is saved (APAR PO09650).
- A crash might occur during golive. Error message E 0063 is written in the log files. The problem occurs when an index is created and an orphan sequence is included due to an incorrect condition (APAR PO10109).
- Simulation allocates memory for inherited noninput attributes. The allocation is unnecessary.
- In simulation query, noninput attributes are empty if the data is not available in MDC (APAR PO10017).

- A crash might occur if a query count is running and the API is interrupted (APAR PO10112).
- On **Administration > System > User > Enable system account**, a value that you enter in **Allow system users from IP** appears to be saved but it is not.
- After the reset index, rebuild index, and re-create index jobs are run, filled indexes cannot be populated (APAR PO10040).
- On **Monitoring > Defined risk list entries > Defined risk list entries**, the save icon is disabled after saving an entry with an invalid operator in the condition. For 6.6.0.00, the save icon is hidden.
- On **Model > [challenger revision] > Transaction enrichment > Mergings**, an undefined error is issued if a merging with collusions is created and always is selected in **Store source**.
- On **Model > [mandator] > Revision overview > Revision Control > Compare Revisions**, the name of the changed rule is displayed as undefined. Also, the name of the unchanged rule is not displayed correctly. The problem happens when a revision is compared to an older revision (APAR PO10013).
- After a logical golive on a submandator is run and then end of day jobs are run, key performance indicators and status alarm indicators cause unrecoverable errors and do not compute. The problem occurs if the indicators are defined on a top mandator that uses an attribute from the submandator in a condition (APAR PO10123).
- On **Model > [mandator revision] > Modeling > Analyses > Attributes**, attribute intervals are not displayed correctly (APAR PO10124).
- On **Cluster > System monitoring > Settings > Cluster settings**, improved the error message that is displayed when you try to create an instance with an ID that is outside the allowed range of 1 to 7.
- When a page in the user interface is read only, icons that should be clickable, for example, the help icon, are not clickable. Other icons, for example, section toggle checkboxes, are not clickable as expected but are not disabled (APAR PO09864, PO10137).
- On **Administration > Jobs > Settings > [report generation job]**, results cannot be downloaded if the API is disabled on a BDI (batch data interface) instance. Also, multiple types of jobs cannot be opened in view mode if the API is disabled (APAR PO08707).
- A crash might occur when nested XML is loaded on the BDI with multiple threads. Also, backtraces might occur if XML that has no closing tags, for example, an XML header, is used together with a nested XML parser in BDI job files (APAR PO10101, PO10102).
- Queries and simulations include transaction records that they should not. The problem is due to how absolute and relative server times are resolved during data selection (APAR PO10161).
- When a case is written to FLI, all case alarms are also written. The usage of FLI buffer is therefore unnecessarily increased. Now, only the case alarm with the highest score is written to FLI.
- A crash might occur when a counter is deleted, and at the same time a data export job is updated.
- A crash might occur when references are deleted or created for the same element at the same time (APAR PO10157).
- An error occurs during simulation or when a transaction is computed because internal random forest fails due to an empty categorical attribute (APAR PO10129).

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- When you click or tab out of a date field, timestamps shift forward or backward by a value that is equivalent to the user's time zone offset. The problem occurs only if European or US date formats are used. Now, dates are handled correctly and consistently for all date formats (APAR PO09719).
- Made numerous corrections and improvements to the online help.
- On **Model > [challenger revision] > Modeling > Simulation**, icons in the **Status** column of the instance assignment table are cut off.
- On **Investigation > Investigation > Case selection**, the online help text is incorrectly formatted and out-of-date.

- On **Cluster > Maintenance > cleanout revisions**, the text description in the tooltip does not explain the actual behavior. The same problem exists in the online help.
- On **Administration > Jobs settings > export data job**, there is no log message if the job is canceled.
- When an instance starts, release information and the instance ID are not written to any configuration file. Now, the information is written to the `iris.iris` file. The information is useful when debugging problems.
- On **Model > [mandator revision] > Scoring engine > Model Component**, the online help contains grammatical mistakes.
- On **Model > [mandator revision] > Scoring engine > Model Component > [PMML component] > PMML Model Import**, the tooltip does not match behavior. The same problem occurs in the online help.
- On **Model > [mandator revision] > Postprocessing > Final ruleset**, the text for the tooltip for the **Add new** icon is incorrectly formatted.
- On **Cluster > System monitoring > System internals > General information**, the timestamp for deferred writing has no time zone information.
- On **Administration > System > Configuration > Misc > Event log messages, Maximum records shown (records) and Default view period (seconds)** accept negative values. The same problem occurs for other configuration fields.
- On **Cluster > System monitoring > Event log messages > [Event log message]**, the online help contains unrelated sections.
- On **Investigation > Queries > Common point queries**, the **Save** icon works correctly. However, the **Save and execute** icon can be clicked even if the query is incomplete.
- On **Administration > System > Configuration > System > Deferred writing**, a misleading error message is displayed if deferred writing is enabled. The problem occurs if there is not enough memory to enable deferred writing.
- On **Model > [challenger mandator] > Golive**, the golive report sometimes does not display the correct operational message. The problem occurs, for example, when the DDC for attributes with System time meta attribute is too small.
- On **Cluster > System monitoring > Settings**, table icons are misaligned. The same problem occurs for other tables.
- The audit log that is generated during golive contains a misspelling.
- On **Cluster > Maintenance > [set MDC/DDC sizes]**, an error message incorrectly displays. The problem occurs if the selected revision is not a challenger.
- On **Model > [mandator revision] > Transaction enrichment > Masterdata**, the online help for **Forward to external system** is missing.
- On **Model > [challenger revision] > Modeling > Rule scoring**, the Commit changes to all rules confirmation message contains incorrectly formatted text.
- If the `setOffline` request is performed twice, the second run might take many hours to finish (APAR PO10117).
- On **Cluster > [instance] > Interfaces > Application Program Interface**, online help is missing for **Incoming connection limit**. The online help is also missing for the same setting on the Message Command Interface tab.
- On **Model > [mandator revision] > Modeling > Test Sandbox**, the online help is out of date. It describes elements in the old user interface.
- On **Investigation > Case selection > [case]**, the **Masterdata** tab does not show if only one multivalue masterdata is enabled for the card.
- Updated OpenSSL to 1.1.1w. Updated Libcurl to 8.4.0 on the server.
- On **Administration > Case management > Case classes > [case] > Layout settings**, the edit menu in tab sections is not available if the tab name is longer than about 20 characters. For the problem to occur, the **Use custom layout** option must be enabled for the case class. Now, a tab correctly expands to show the full name and its edit menu.

- On **Administration > User management > Accounts > [user] > Global Privileges**, if **System configuration** is set to View, the user can edit the system configuration pages. The user should be able to only view the pages.

Download instructions

Download IBM Safer Payments 6.3.1.07 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release date	Language	Size
IBM Safer Payments 6.3.1.07 download link	14 February 2024	English	153.04 MB

For information about using Fix Central, see [Fix Central help](#).

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_3_1_07.zip

```
6cfe532b23660317bc378274036ff45a364db6bebff1a975a41a9120673c65fc
```

- MD5

SaferPayments_6_3_1_07.zip

```
3e4cc13e8e6c56ba9445dd55e0d93b85
```

Chapter 15. 6.3.1.08 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.3.1.08.

This release changed the version number from 6.3.1.07 to 6.3.1.08. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.3.1.08 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.3.1.08 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [6.3.0.00 Update information](#)
- [6.3.0.01 Update information](#)
- [6.3.0.02 Update information](#)
- [6.3.0.03 Update information](#)
- [6.3.1.00 Update information](#)

- [6.3.1.02 Update information](#)
- [6.3.1.03 Update information](#)
- [6.3.1.04 Update information](#)
- [6.3.1.05 Update information](#)
- [6.3.1.06 Update information](#)
- [6.3.1.07 Update information](#)

6.3.1.08 Update information

- On **Investigation > Queries > Group by queries Fraud Ratio** is now calculated as basis points. The new formula is: $10000 * ((\text{fraud amount}) / (\text{total amount}))$. Before the update, **Fraud Ratio** was calculated as $(\text{fraud amount}) / (\text{genuine amount})$. If the CSV file is used in external systems or values are used for other calculations, change your system to accommodate the new calculation results.
- It is now possible to send statusRequests to MCI for nonxml messages. Also, it is possible to set a messageTypeId for MCI statusRequests. If no messageTypeId is set for a status request, it responds with the type of the message that is used by the Inbound Endpoint.

Change log

IBM Safer Payments 6.3.1.08 includes major and minor defect fixes, Known Issues, APARs, and changes.

Critical defects

The following critical defects were fixed:

- None

Major defects and changes

The following major defects were fixed and major changes were made:

- On **Investigation > Queries > Queries > Query Data Selection**, data selection ranges display as icons. Also, there is too much white space. The problems occur anywhere that has that data selection layout, for example, **Simulation**, **Group by queries**, **Reporting queries**, and **Common point queries**.
- On **Monitoring > Defined risk list entries**, if an entry that has escaped JSON characters is deleted, an error is logged on remote instances (Known Issue DT378209).
- A crash might occur when a setOffline or setOnline request is performed while an IBE (Index Based Evaluation) job is running.
- Python modules cannot be deleted even if they are not referenced (APAR PO10122).
- On **Investigation > Queries > Group by queries**, the name of the query is not displayed in the title of the results page (APAR PO10149).
- When a revision with many masterdata definitions is changed and then synchronized on remote instances by using the FastLink Interface, the synchronization takes a long time (Known Issue DT269755).
- On **Investigation > Investigation**, use any menu item to open an existing case. The title contains the case ID, which is formatted with an unnecessary space after the hyphen. If you copy the case ID and try to search for it, the search fails due to the space (APAR PO09851).
- Throughout the user interface, a table with many columns does not fit on the screen. Now, the minimum column width is smaller.
- A crash might occur if a getCppsToHighlight API request with a nonexistent query UID is sent (APAR PO10155).
- On **Monitoring > Defined risk list entries**, the toolbar icon to display defined risk list audit trails is missing (APAR PO10154).

- On **Administration > Mandators > Settings**, the value in **Name** can be changed to one that is already used in another mandator. Then, a crash or failure occurs when the system is restarted.
- When the **Open rules table** icon is clicked, the rules that are listed are not correctly filtered. The access points to the icon are **Model > [revision] > Data model > Preprocessing rulesets**, **Model > [revision] > Scoring engine > Model components**, and **Model > [revision] > Post processing > Final rulesets**. When you click the checkmark next to a ruleset, the **Open rules table** icon displays.
- Several problems occur with reporting progress in ad hoc queries, index queries, hyperlink queries, and common point queries. If a query finds fewer than 20 matching transaction records, progress displays as 0% for the entire runtime. If a query finds more than 20 matching transaction records, only matching records are included in the progress percentage. If matches occur rarely compared to the overall record range, progress is rarely updated and never reaches 100%.
- On **Investigation > Queries > Group by queries**, **Fraud ratio** is not calculated correctly. It is calculated as (fraud amount) / (genuine amount) instead of (fraud amount) / (total amount). It is often a small number (less than 0.01), which is difficult to represent accurately. Now, **Fraud ratio** is calculated as basis points. The new formula is: $10000 * ((\text{fraud amount}) / (\text{total amount}))$. Also, the table header, CSV header, and graph label now display the text **Fraud Ratio (BP)**, where *BP* is for basis points (APAR PO10054).
- On **Administration > User management > Accounts**, when a new user is created, check boxes selections that are made under **Global privileges** are not saved.
- The end-of-day job can run in parallel with setOffline (APAR PO10118).
- When BDI (batch data interface) is used to import an encrypted file, a PREMATURE_END_OF_LINE error is issued. The problem occurs only if **Use AES CTR encryption** is enabled in **Administration > Jobs > Settings > [Job] > Load file settings > Enable encrypted delivery**.
- When a new query is created on **Model > [revision] > Modeling > Simulation > Queries**, the save icon is disabled. The problem occurs if the **Investigation > Query > Change privilege** is not enabled on the user's role (APAR PO10039).
- When a user is created with the copy function, that user is not forced to change their password the first time that they log in.
- The rebuild index maintenance function ignores mandator conditions, index computation conditions, index insertion conditions, and records that have an invalid timestamp. Also, masterdata is changed from nil to zero after the index is rebuilt (APAR PO09778).
- On **Model > [challenger revision] > > Modeling > Simulation > Queries > Index query**, the query uses production data rather than simulated data. The same problem occurs for hyperlink queries. The results are wrong if the index that is used by the query was changed in the simulation. Hyperlinks in other simulation query results work correctly.
- On **Model > [revision] > Modeling > Analysis > [analysis] > Analysis Data Selection**, if you add a condition attribute that is encrypted, it is not readable the next time you open the analysis (APAR PO09569).
- During a master key change, an instance that is in passive mode cannot receive messages through AMI (Alert Message Interface).
- When a fraudMarkingReport request is saved by using a script, an error is printed to logs if the mandator in the request is not the UID of an existing mandator.
- The StatusRequests API always responds in XML, even when a JSON messageId is sent. Also, StatusRequests do not have a valid date in the HTTP response header (APAR PO10175).
- A crash might occur when message definitions are added or removed and MCI bypass errors occur at the same time.
- Throughout the user interface, tables with many columns load slowly. Now, tables load faster. The default limit of displaying only 40 columns was removed. White space and default column width relative to the content was optimized. If you double-click the "change column width" handle, the column width adjusts to fit the content of the cells. If the Google Chrome browser is used, you can now select a range of table rows by pressing shift and then clicking the first and last rows in the range.

- On **Model > [revision] > Data model > Inputs > Own input attributes > [counter attribute]**, attributes of type hexadecimal are not listed under **Reference attribute**. The same problem happens on **Model > [revision] > Data model > Outputs > Own output attributes > [counter attribute]**.
- On **Model > [revision] > Modeling > Model factory > Rule**, a crash occurs if the **Generated Rules** list contains conditions that use the `is true` or `is false` Boolean operators.
- On **Administration > Jobs > Settings**, if an end-of-day job starts while an export job is already running, the export job pauses until the end-of-day job finishes. That process is correct. However, after the end-of-day job finishes, the export job does not continue from the point it stopped. Therefore, duplicate records are present in the export file (Known Issue DT261334).
- On **Cluster > System monitoring > Settings > [setting] > Interfaces > Encrypted Communications Interface (ECI)** tab, the checkboxes to enable and disable the **Validate server certificate** and **Validate client certificate** sections are missing. The same problem occurs on the **Application Programming Interface (MCI)** tab.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- For versions 6.3.x, 6.4.x, and 6.5.x, on **Investigation > Queries > CPP selection**, the **New CPP** icon is enabled for users who have the read-only CPP selection privilege. For versions 6.6.x, the same problem happens with the **New CPP** and **Delete CPP** icons.
- On **Investigation > Case creation**, information about the **CPP** field is missing from the online help. CPP stands for *common point of purchase*.
- When an item in the user interface is deleted, the confirmation message refers to the **Confirm** icon. However, there is no **Confirm** icon. The problem occurs on numerous pages.
- On **Administration > System > Configuration > Authentication Settings**, the **Automatically Re-login** checkbox has no functionality. It appears only if **LDAP** or **Local then LDAP** is selected in **Authentication method**. The checkbox has been removed.
- On **Model > [revision] > Modeling > Analyses > Attributes**, text for the progress circle is missing.
- On **Investigation > Queries > Reporting queries**, improved the online text for reporting query conditions and performance indicators.
- On **Administration > System > Configuration > User**, the online help for **Use common password blocklist** is missing.
- On **Model > [challenger revision] > Modeling > Simulation**, the logs do not mention forwarded HTTP requests. Responses for forwarded HTTP requests are also not logged.
- On **Administration > Case management > Case actions > [case action setting]**, online help is missing for **Available for manual fraud marking**.
- On **Investigations > Queries > CPP selection**, the online help does not adequately describe the feature.
- On **Model > [revision] > Transaction enrichment > Mergings**, the **Mandator UID** column header is missing. On **Model > [revision] > Data model > Mappings**, the **Attribute UID** column header displays incorrectly.
- On **Model > [challenger revision] > Modeling > Rule analysis**, tooltip text for **Saved amount per false alarm** is missing.
- On **Model > [revision] > [conditions]**, if the condition order is changed and one of the expressions has an error, the error is copied to other conditions. The problem occurs in all model components that have conditions, for example, patterns.
- When a page is saved and then reloaded, a problem occurs if it has conditions that are based on intercept code, case queue, or notification meta attributes. The page might show that expressions are in error even though they are valid.

- On **Administration > System configuration > Misc > Miscellaneous**, the logs omit that end-of-day jobs are disabled. On **Cluster > System monitoring > System internals**, the last execution time for end-of-day jobs is omitted.
- On **Administration > System > Configuration**, the **Download IBM Safer Payments configuration** icon is displayed to users who lack the privilege to use it.
- The online help for maintenance functions is missing information. It does not clearly state that when a maintenance function encounters an error, the instance is put in an error state.
- On **Report > Report > Missed cases**, a value that is selected in **Time unit (before)** changes to `hours` after IBM Safer Payments is restarted. For example, if **Time unit (before)** is set to `days`, it changes to `hours`.
- Throughout the user interface, too much white space displays in table cells (APAR PO09366).
- On **Model > [challenger revision] > Modeling > Attribute setting > [attribute]**, the words undefined text are displayed.
- When records are marked as fraud or genuine on **Investigation > Queries > Queries**, the **Fraud value** can be omitted. The result is that an invalid default value is sent to the server (Known Issue DT261601).
- Now, HTTP notifications can be sent as HTTP/1.1 in their HTTP header. The HTTP/1.1 header contains an additional PORT in the Host entry, and an additional Connection: `close` entry. To send notifications with HTTP/1.1 header, select the new setting **Use HTTP 1.1 header**. It is located on **Cluster > Interfaces > Outgoing channel configuration > [configuration] > Type settings**. HTTP/1.0 does not send a PORT in the Host header.

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IBM Safer Payments 6.3.1.08 download link	16 May 2024	English	153.04 MB

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```

- MD5

SaferPayments_6_3_1_08.zip

```
8a9f6dbb5f65e99963e6e406faf967af
```

Chapter 16. 6.3.1.09 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.3.1.09.

This release changed the version number from 6.3.1.08 to 6.3.1.09. It contains Low Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.3.1.09 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.3.1.09 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.3.0.01 to 6.3.1.09	6.3.0.01 and up to 6.3.1.09
Major release	The target version up to the fix pack that you are installing	6.2.x to 6.3.1.09	6.3.0.00 and 6.3.x up to 6.3.1.09
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.3.1.09	6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.0.x to 6.3.1.09	6.1.0.00, 6.2.0.00, 6.3.0.00, and 6.3.x up to 6.3.1.09

If needed, see:

- [6.3.0.00 Update information](#)
- [6.3.0.01 Update information](#)
- [6.3.0.02 Update information](#)
- [6.3.0.03 Update information](#)
- [6.3.1.00 Update information](#)

- [6.3.1.02 Update information](#)
- [6.3.1.03 Update information](#)
- [6.3.1.04 Update information](#)
- [6.3.1.05 Update information](#)
- [6.3.1.06 Update information](#)
- [6.3.1.07 Update information](#)
- [6.3.1.08 Update information](#)

6.3.1.09 Update information

- The system must no longer be restarted if you change **Fastlink Interface (threads)** on **Administration > System > Configuration > System > Number of Parallel Threads**. Now, Fastlink interface connections are automatically dropped and re-created if **Fastlink Interface (threads)** is changed.
- Debug log message 889 and error log message 888 were added to log details of ITEM_NOT_FOUND issues. If you run into an issue with an ITEM_NOT_FOUND error, then you can enable the debug message 889 to print more information about the error in the logs.
- If an encrypted numeric reporting attribute exists and **Mask encrypted values** is selected on **Administration > Mandators > Settings > [mandator] > Relational Database Interface**, the value is now inserted into the VALUE_TEXT column. Previously, it was inserted into the VALUE_NUMERIC column.
- Now, Db2 SQL statements that are output through the relational data interface (RDI) wrap table and column names in double quotation marks rather than single quotation marks. As of Db2 version 11, single quotation marks are no longer supported. Therefore, Db2 version 10 is no longer supported.

Change log

IBM Safer Payments 6.3.1.09 includes defect fixes, changes, Known Issues, and APARs.

Critical defects

The following critical defects were fixed:

- Buffer overflow and uncontrolled memory allocation errors occur in MCI when remote systems send arbitrary large requests.

Major defects and changes

The following major defects were fixed and major changes were made:

- A crash might occur when a challenger revision is deleted while a random forest model generation is running (APAR PO09971).
- If you change **Fastlink Interface (threads)** on **Administration > System > Configuration > System > Number of Parallel Threads**, the system must be restarted. Then, synchronization issues occur between instances.
- An error message is printed when messages are computed and then the computation stops. The problem occurs after a counter is copied, and the original counter uses a peer index with **target** sequence and the new counter uses an index to another nonpeer index. The problem can also occur when events, mergings, patterns, precedents, and profiles are copied in the same way. Also, index queries might return incorrect results after they are copied from a query that uses a peer index with **target** sequence (APAR PO10136).
- In rare situations, a crash might occur when a table that shows rules or conclusions is opened (Known Issue DT391564).
- When MCI bypass is deactivated, a long wait time occurs until the instance can process new MCI messages again.

- When extended authentication is enabled and a new user logs in, the login page is displayed rather than the one-time password (OTP) page (Known Issue DT277055).
- On **Administration > Jobs > Settings**, when you run a BDI Load file job with **Re-create interval index** enabled, the indexes on remote instances are not populated after the job finishes (APAR PO10063).
- A crash might occur due to a thread leak in the Kafka Message Interface.
- On **Model > [revision] > Model factory > Model training > Rule Designer**, select an item and click **Explore all indicators**. Data selection conditions and rule generation conditions are not correctly applied. Therefore, data for other items is included in the selected item (Known Issue DT380010).
- Improved performance for rule reports and rule queries. The improvement is especially evident when a ruleset contains many rules whose conditions are not met (Known Issue DT379143).
- Added the new **Cluster > Maintenance > Cancel or continue recreate index** maintenance function. If an error occurs while a re-create index job is running, you can now exit the job or continue. Use the **Cancel or continue recreate index** maintenance function only under the advice of IBM Support.
- After rule generation is started, the error `Only challenger revisions can be simulated` might be issued. The error continues to display even after you leave the page and also after the process stops or is disabled. The same problem might also occur when the retention settings report is started.
- When you create a condition in the user interface, for example, in a query, the message `There is no corresponding category defined for the selected attribute` might display. The problem occurs if the selected attribute has categories and the expression uses single wildcard characters, for example, `*` or `?` (APAR PO09835).
- MS SQL statements print with incorrect enclosing characters for table and column names (Known Issue DT381678).
- A crash might occur during the end-of-day job after the `systemtime` metaattribute is resized. The problem occurs when logical golives are enabled and rules with performance report are defined (APAR PO10065).
- On case investigations, for example, **Investigation > Investigation > Case search > [case]**, only masterdata cards that are linked to one index display content. Masterdata cards that are linked to multiple indexes do not display content (Known Issue DT386110).
- When golive is run, the oldest URID in the index is set to a wrong value if the index was rebuilt (Known Issue DT389262).
- SQL statements for reporting attributes attempt to insert masked numeric attributes into the `VALUE_NUMERIC` column.
- SQL DELETE statements that are created for cases through the relational data interface (RDI) use invalid syntax.
- Db2 SQL statements that are output through the relational data interface (RDI) wrap table and column names in single quotation marks. As of Db2 version 11, single quotation marks are no longer supported. Now, table and column names are wrapped in double quotation marks.
- A crash might occur when XML files that contain the string `POST` are loaded by using a BDI load file job. The same problem occurs with JSON files that start with the string `POST` (Known Issue DT378504).
- Updated OpenSSL to 1.1.1y. Known potential security issues exist in 1.1.1x.
- After a golive finishes, memory usage increases more than expected if **Model > [revision] > Data model > Indexes > [index] > Purge outdated** is enabled (Known Issue DT387182).
- On case investigations, for example, **Investigation > Investigation > Case search > [case]**, if you filter or sort an index query, the wrong rows are highlighted in the query results (Known Issue DT389546).
- When you apply a filter in a table and then click a column title to sort the table by that column's values, the sort does not work (Known Issue DT389548).
- A crash might occur if you delete a ruleset or move rules out of a ruleset while a simulation rule query is running.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- On **Model > [revision] > Modeling > Analyses > Rule optimization**, variables in the tooltips for several fields display as {0}, {1}, and {2} rather than correct values.
- On **Investigation > Investigation > Queries > Common point queries**, hexadecimal query parameters display incorrectly on the results page. For example, a value like 1111123412341234 might display as ???4?4?4. Also, sometimes the results page is not displayed.
- On **Monitoring > Defined risk lists > Defined risk lists entries**, when you click **Import entries from a file**, the **Add condition** icon under **Filter Criteria > Add condition group** is sometimes missing (APAR PO10172).
- On **Model > [challenger revision] > Scoring engine > Model components > [PMML model] > Import PMML model > Data Field Mapping**, error text for the option **no encoded category selected** is missing.
- On **Administration > System > Configuration > System > Page auto refresh, Session countdown (seconds)** does not allow a zero value. Also, if **Notice (seconds)** is set to zero, the user interface stops responding (APAR PO10147).
- On **Model > [revision] > Modeling**, tabs for reminders display on some simulation analysis result pages, for example, rule overlap. Now, the tabs were removed.
- On **Administration > System > Configuration**, click **Download IBM Safer Payments configuration** but then do not select an instance. An error is displayed rather than a statement that the instance is missing. Now, the current instance is used as the default if no instance is selected.
- On **Administration > Mandators settings > Relational Database Interface**, the **REVISION_NUMBER** field is missing from the **RULESFIRE** table in the online help.
- On **Investigation > Investigation**, open a case that was originally created by using manual case creation. Log message 744 is printed in the logs. It is printed every time that the case is opened (APAR PO10177).
- On **Administration > System > Configuration > Interfaces > FastLink Interface**, an error occurs if a noninteger value is entered in **Buffer size (GB)**.
- On **Administration > System > Configuration > Investigation & queries > Compliance monitoring**, decimal values cannot be entered in **Reload wait factor (times)**. The field accepts only integer values. The same problem occurs with **Remote golive wait factor (times)**, which is located on **Administration > System > Configuration > Modeling > Decision Models**.
- **ITEM_NOT_FOUND** error messages do not provide sufficient information for debugging. For example, the item that is missing is not provided. Now, many **ITEM_NOT_FOUND** error messages were improved.
- If the Google Chrome browser is used and you view tables, the table height is too large by half a row. The problem occurs if you click **Fit to screen** and then later reduce the value in **Settings > Number of rows**.
- In tables where a **more** icon might display, the icon is hidden if the cell is too narrow for the content. The **more** icon might appear in the **Comment** column on **Investigation > Investigation > Case search > [case] > Common point queries > Audit trail**. It might also appear in the **Model > [revision] > Modeling > Model factory > Rule > Model training > Generated Rules** table if **Generated conditions as popup** is enabled (Known Issue DT389549).

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